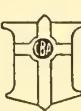


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THESIS

An Appraisal of the Services of the Public Warehouse

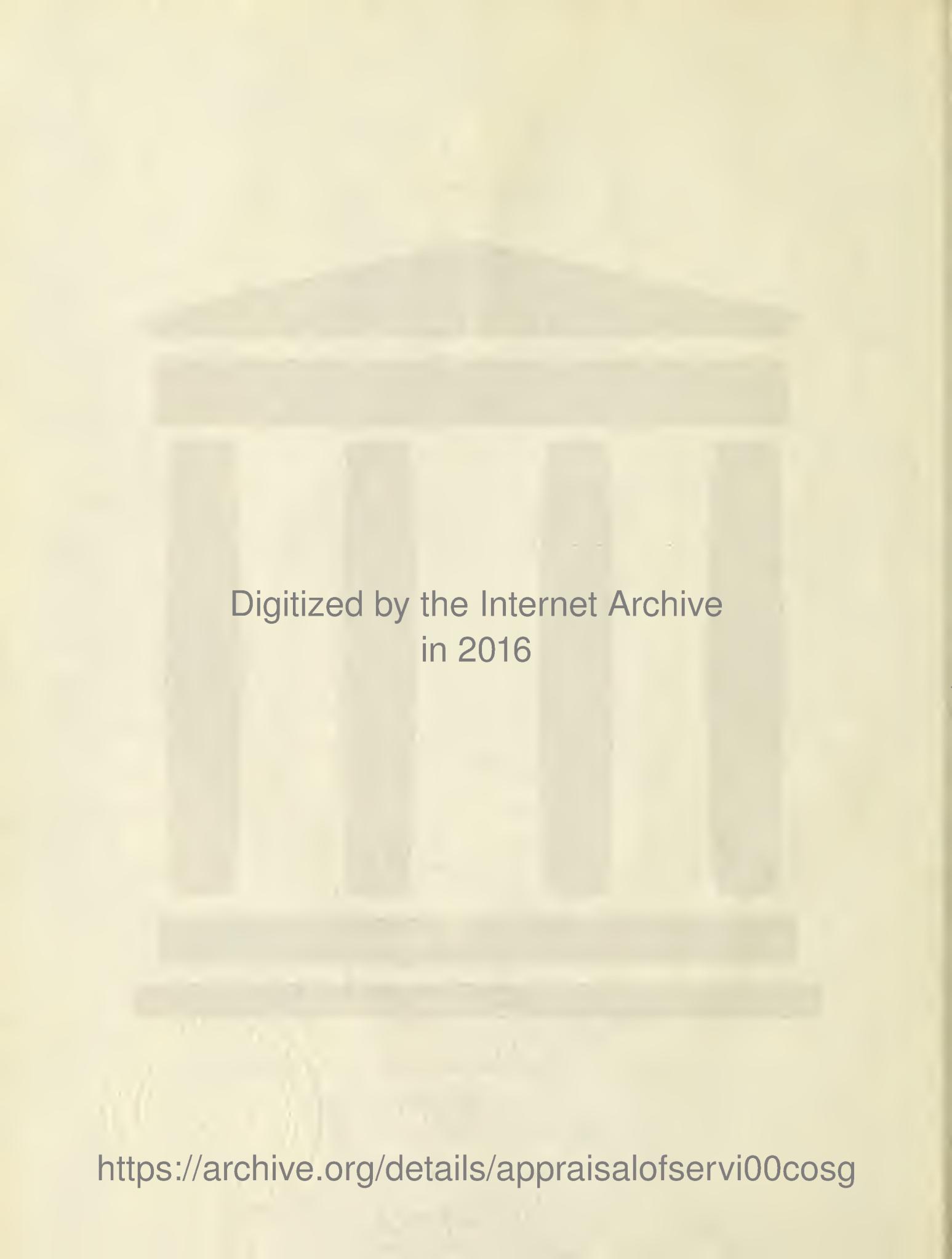
by

Russell Edward Cosgrove
(B.S. in B.A. Boston University 1948)

Submitted in partial fulfillment of
the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

1949

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I. INTRODUCTION

A. The Storage Problem

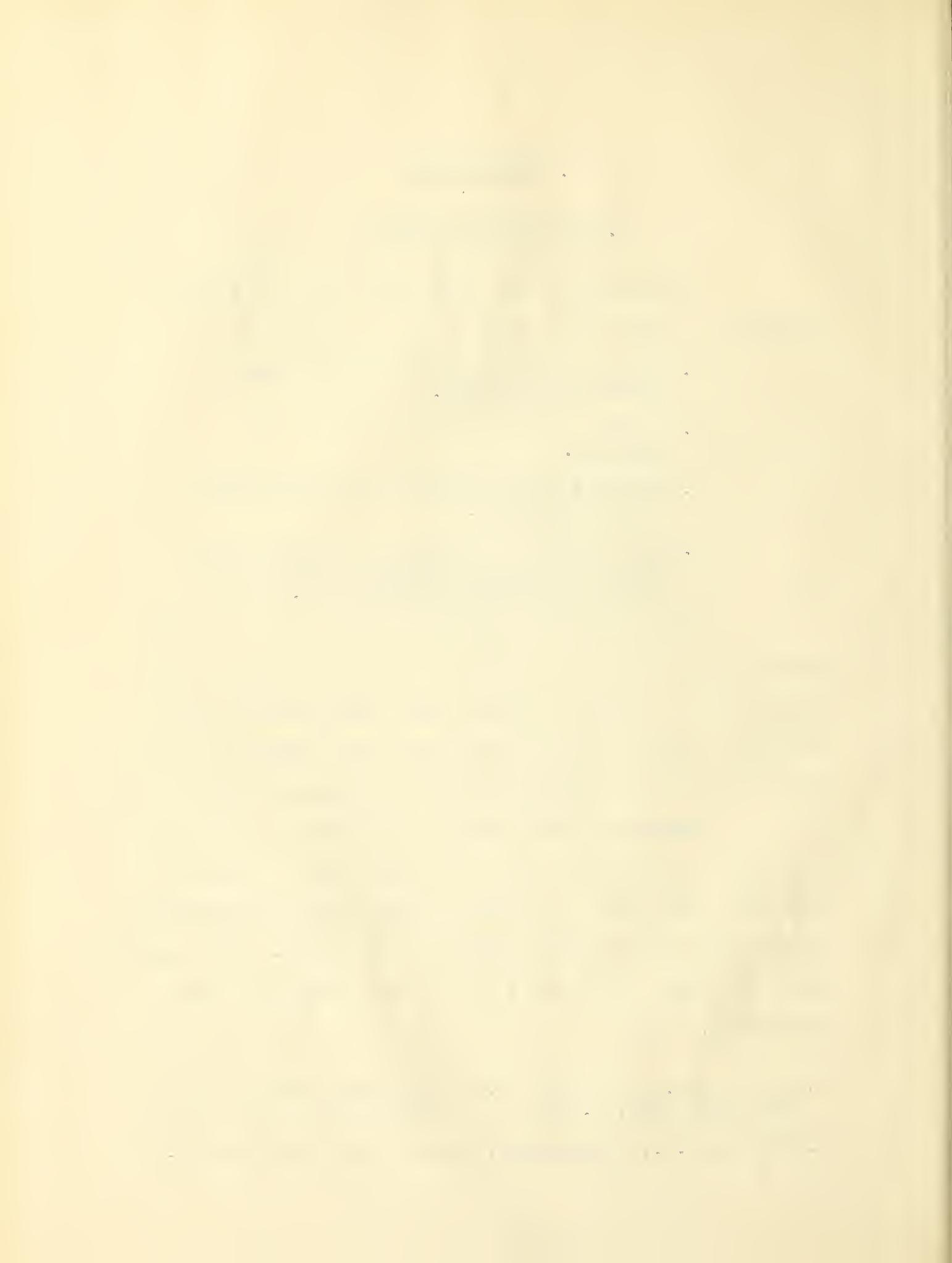
In marketing, the conditions that give rise to storage are generally considered to be the following:

1. Seasonal production and more or less uniform consumption.
2. Uniform production and seasonal consumption.
3. The need for preservation and protection of the commodity.
4. The inability to maintain perfect balance between supply and demand because of the system of roundabout production. (1)

Because of these various factors, it can easily be seen that the great majority of business firms are confronted with a storage problem. The decision that the individual business executive must make is, "Should the storage of my firm be handled by public or private facilities?".

Commercial warehousing, the forerunner of modern day public warehousing, first came into being in Venice in mediaeval times when the cities of the eastern Mediterranean were the prime trading centers of the world. Many present-day warehousing practices can be traced directly to this birthplace. (2)

1. Duddy, E.A. and Revzan, D.A., Marketing, McGraw-Hill, New York, 1947, p. 42
2. Haring, H.A., Warehousing, Ronald, New York, 1925, p. 5



Since that ancient beginning public warehousing has mushroomed into big business the world over. In the United States, in 1935, establishments whose major business was public warehousing had revenue figures of over one hundred million dollars. (1) Because of the magnitude of this industry and its avowed importance in the American distribution scheme, one could reasonably expect to find considerable literature on the subject of warehousing. The fact is, however, that utilitarian literature is difficult to obtain.

There are, of course, a few notable works in the field such as Haring's Warehousing and Frederick's Public Warehousing. However, Haring's work, published in 1925, has been outmoded in many instances by changing practices in the warehouse industry. And, although Frederick's work is certainly scholarly, it is difficult to overlook the fact that he is one of the leading spokesmen for the American Warehousemen's Association.

By and large, the greatest fund of information on present-day trends and practices in the warehousing industry is to be found in the trade magazines which serve that industry. In addition, there are a considerable number of published works on various specialized aspects of warehousing.

1. See reprint from 1935 Census of Business, Public Warehousing, U.S. Department of Commerce, Washington, March 1937, p. 3

Books dealing with such subjects as the financial aspects of warehousing, specialized commodity warehouses such as grain elevators, cotton warehouses, tobacco warehouses, wool storage, etc., and works dealing with numerous other subjects have served to at least partially lift the veil of mystery which surrounded the field of warehousing.

Nevertheless, in spite of this apparent wealth of literature, for the business man who must make the decision as to whether he should store his goods publicly or privately.....there is little to guide him in the making of that decision.

B. Thesis Aim

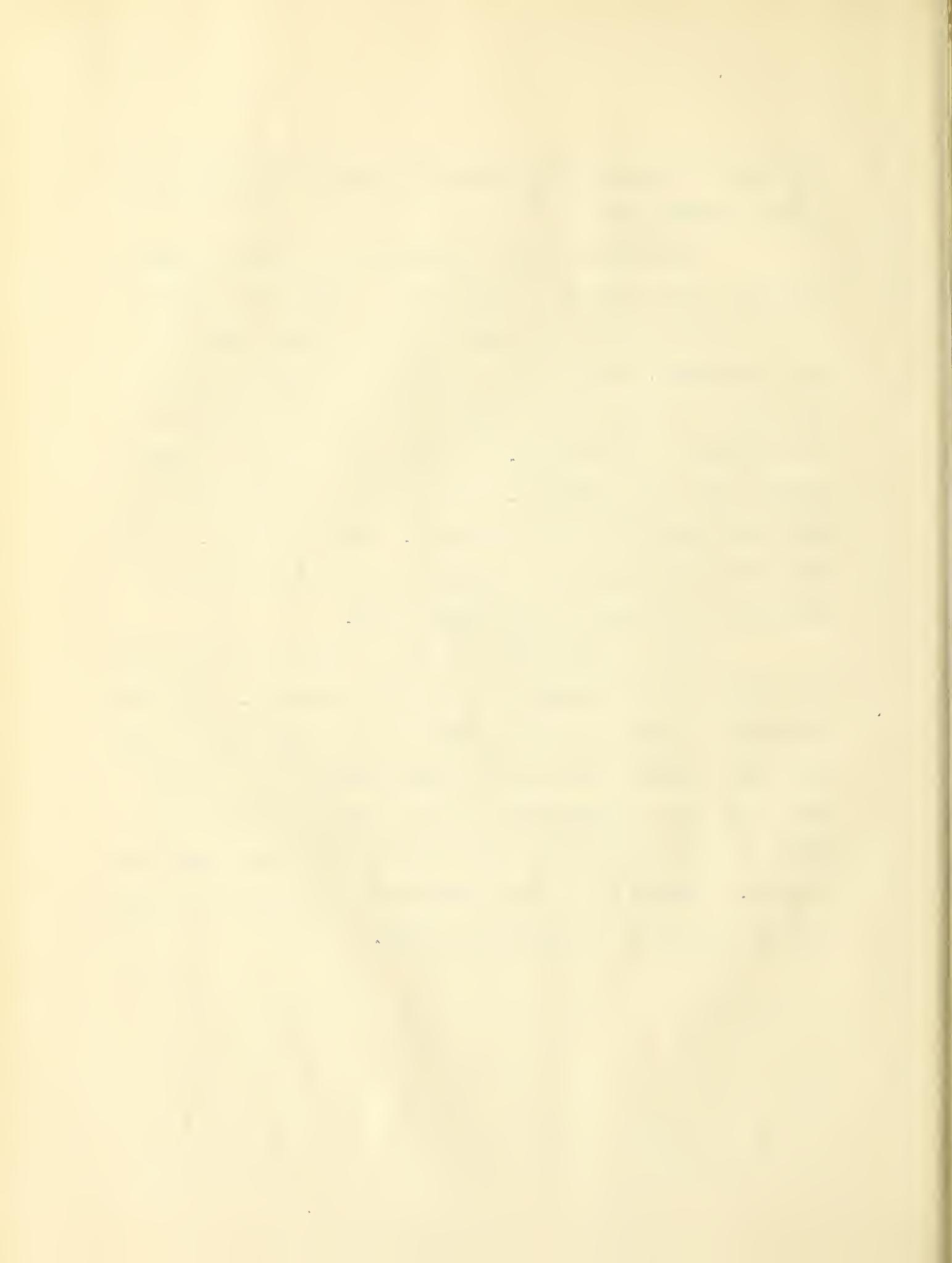
It is the aim of this thesis, in many cases of necessity through the medium of inductive reasoning, to examine the field of warehousing with an eye towards determining what factors the businessman should consider in deciding whether or not to use public warehouse facilities.

The thesis has not been written with the idea of improving on the literature which has already been published on the field of public warehousing. The very word "improve" represented a challenge which the writer did not feel he could meet. Rather than an attempt at improvement, this thesis has been written with the idea of bridging a gapthe gap between that which has already been written and that which the businessman wants to know. Specifically,

why should a business firm choose to use the facilities of a public warehouse?

Since much of the literature on the public warehouse has been written by executives of warehouse concerns (this is particularly true where trade magazine articles are concerned), the task for the writer in many instances has been to evaluate the claims and principles advanced by these warehouse "salesmen". In some cases claims and principles have been qualified, and in other instances entirely new principles have been formulated. Where possible, various statistical data and case studies have been drawn upon to illustrate the general principles stated.

The aim throughout has been to make an intelligent appraisal of the services of the public warehouse. What does the public warehouse have to offer the business man, and why can't the business man perform these services for himself? The writer has endeavored to act as an unbiased observer, relaying to the businessman that information which seems important. Whether he has been successful or not can be judged only by reading the pages which follow.



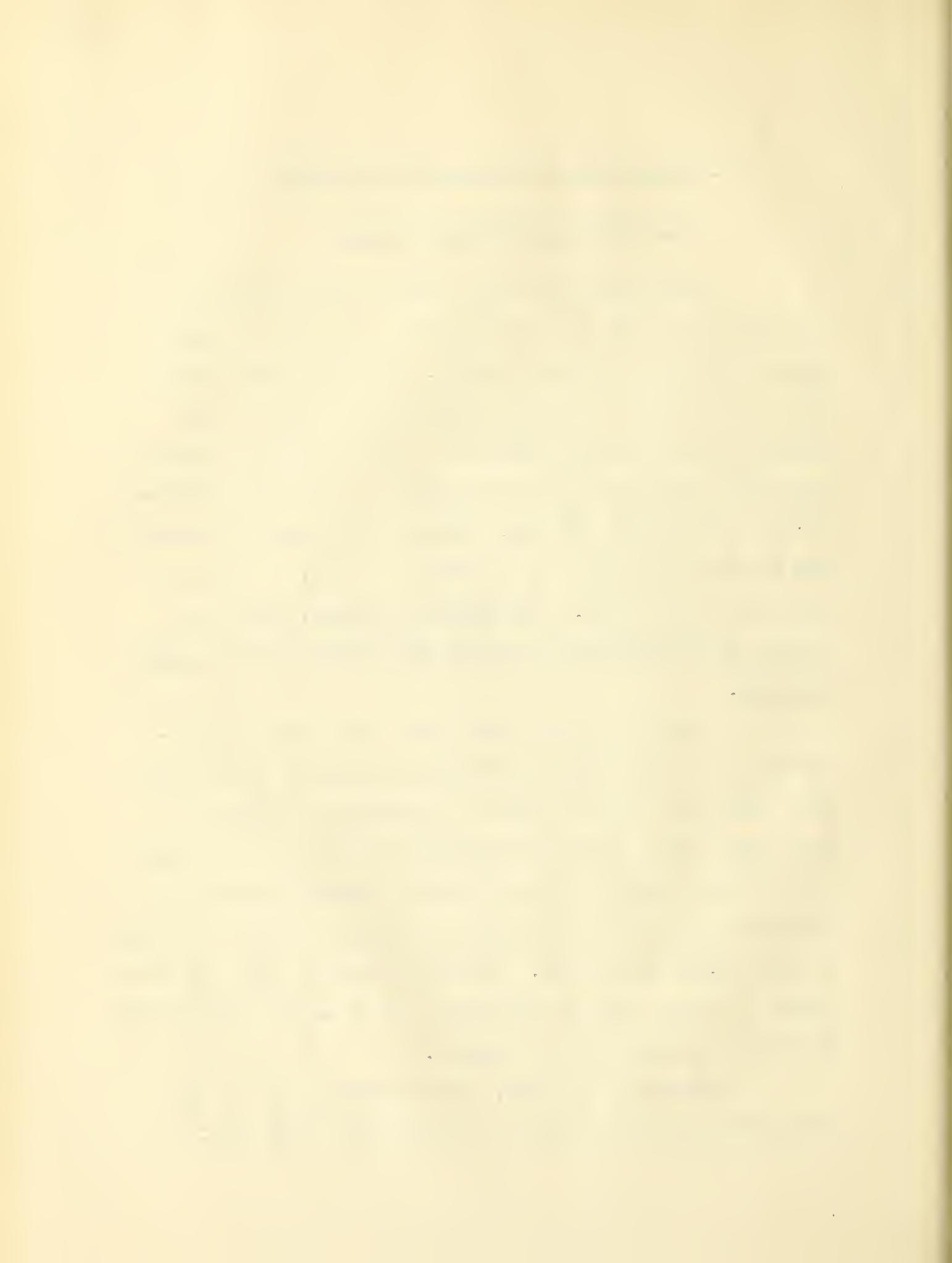
II. BACKGROUND TO THE WAREHOUSE INDUSTRY

A. What Is A Public Warehouse?

The Uniform Warehouse Receipts Act defines a warehouseman as "one who is lawfully engaged in the business of storing goods for profit". With this definition, one cannot lapse into a mere definition of storage and apply it to the public warehouse. Storage implies nothing more than preservation of a commodity. Warehousing implies storing for commercial gain. The main business of the modern public warehouse is the storing of goods, or the creation of time utility. The public warehouse, then, is a concern which holds out to the general public storage space for hire.

Different states have given different interpretations as to just what is a public warehouse. Some states have classified them by types of commodities handled, as in Indiana where warehouses handling grain are termed Class A warehouses and all others Class B. Missouri limits its definition to include only those warehouses located in cities of over 50,000 population. Kentucky does not limit the definition to firms storing "for hire", but uses the phrase "with or without compensation or reward".

Generally, however, the definition given above will suffice as a description of the public warehouse.



B. Public Warehouse Revenue

In accord with the accepted American custom of measuring the importance of any segment of the economy with a rule marked in dollar signs, the division of earnings among the various kinds of warehouses should probably be the first mode of attack here.

For Census purposes, public warehouses are divided into four major groups; household goods, general merchandise, farm products, and cold storage.

Insofar as number of establishments is concerned, farm products warehouses are predominant, accounting for 43.0 per cent of the total number of public warehouses in 1935. General merchandise warehouses accounted for 23.0 per cent of the total, as against 21.5 per cent for warehouses storing household goods, and 12.5 per cent for cold storage warehouses.

When judging the importance of the figures which are to follow, it must be remembered that certain special aspects of public warehousing such as field warehouses, apple sheds, potato pits, state and municipal warehouses, open yard and wharf storage, and automobile storage have not been included in the Census enumeration. Furthermore, as is customary in the tabulation of Census data, only those establishments deriving more than 50 per cent of their revenue from a warehousing-for-hire operation were included in

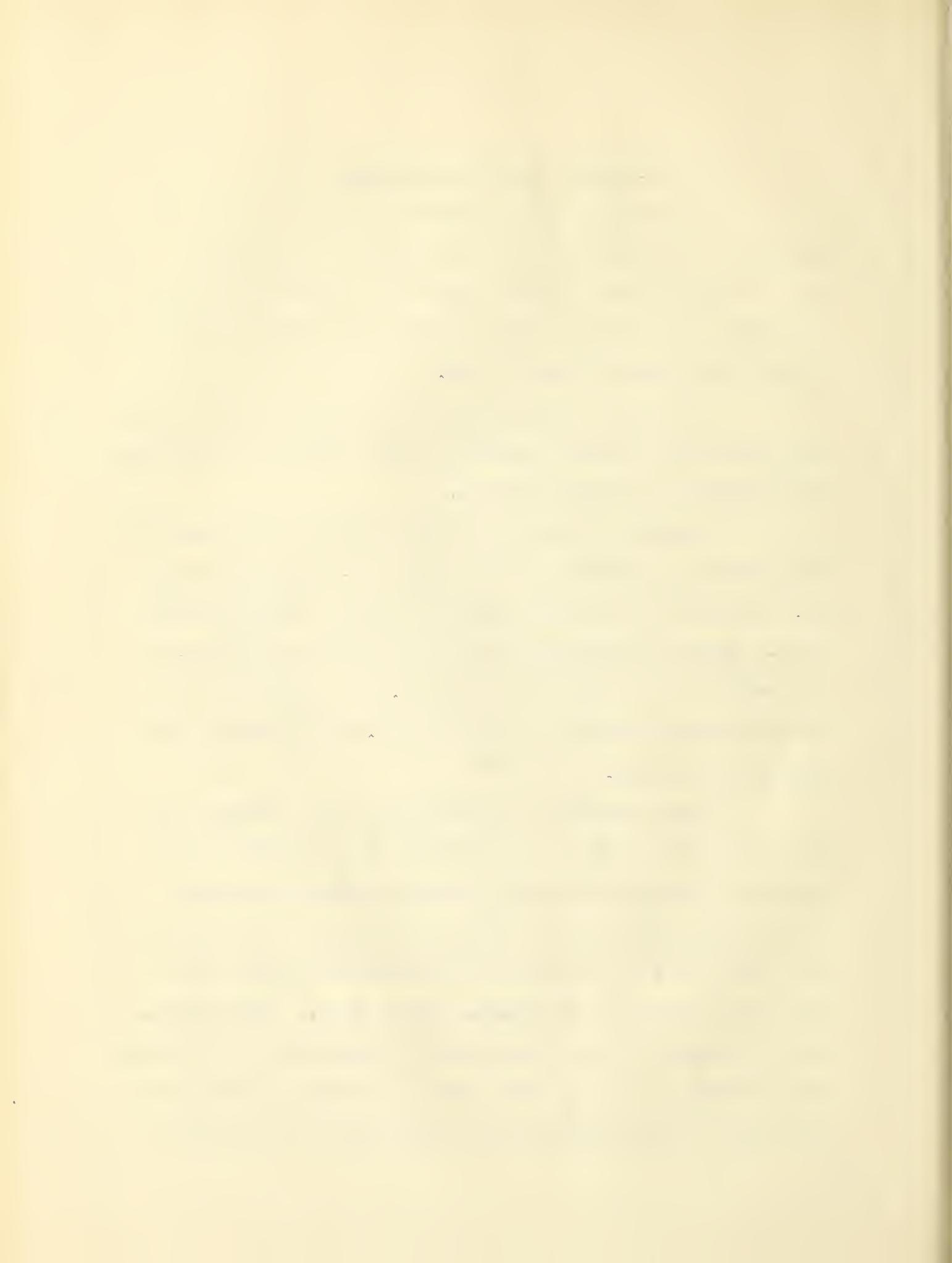


Table A - Number of Establishments, Revenue, Employees, and Pay Roll, by Kinds of Warehousing

Kind of Warehousing	Establishments		Revenue		Employees		Pay Roll	
	Number	% of Total	Amount (Add 000)	% of Total	Avg. Number	% of Total	Amount (Add 000)	% of Total
UNITED STATES	3,014	100.0	\$97,871	100.0	32,785	100.0	\$37,715	100.0
Household Goods	649	21.5	19,204	19.6	5,487	16.7	7,833	20.8
General Merchandise	692	23.0	29,099	29.7	9,925	30.3	12,385	32.8
Farm Products	1,296	43.0	22,573	23.1	10,243	31.3	7,921	21.0
Cold Storage	377	12.5	26,995	27.6	7,130	21.7	9,576	25.4

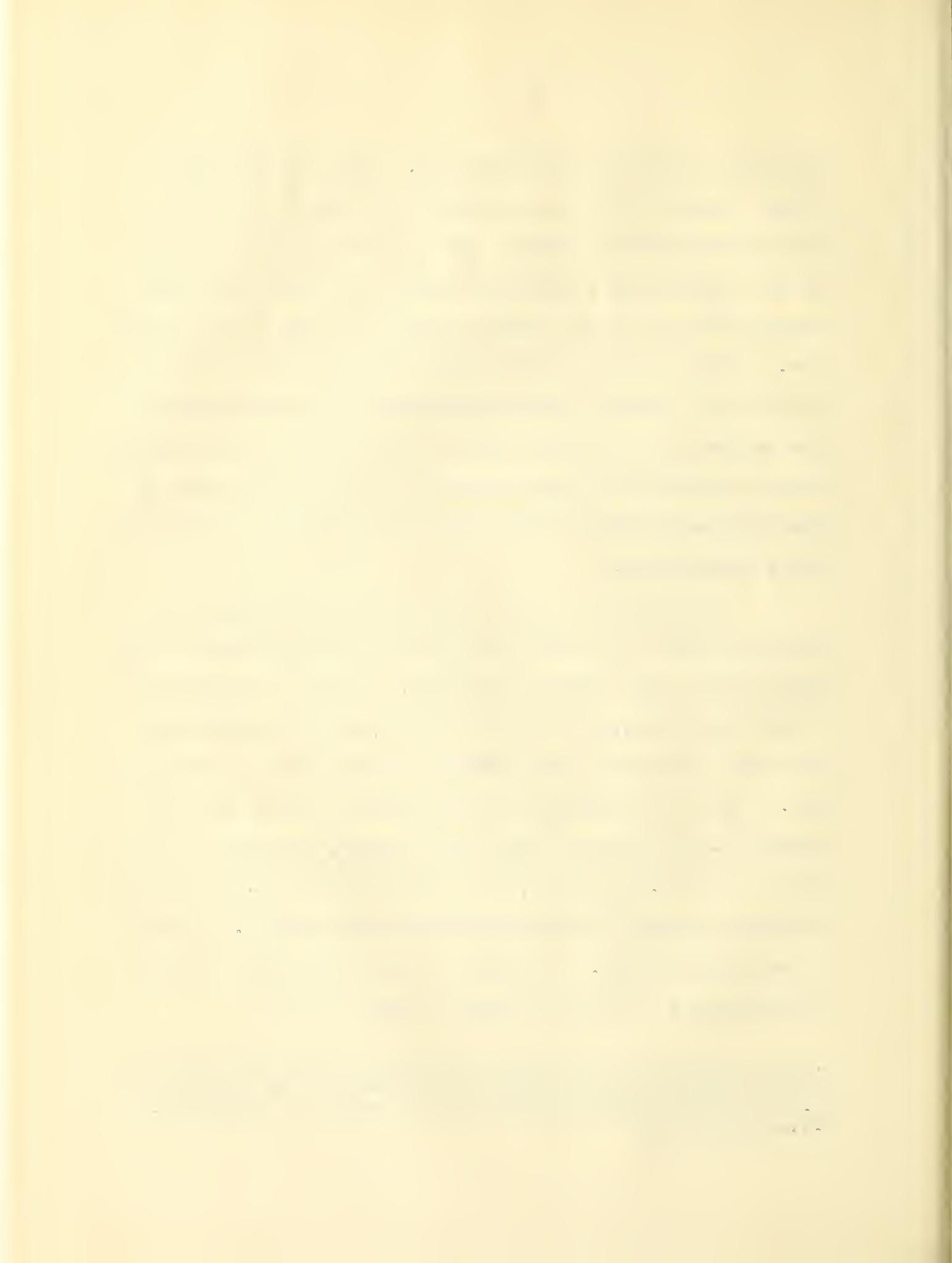
Source: Reprint from 1935 Census of Business, Public Warehousing, p. 4, U.S. Department of Commerce, Washington, March, 1937



the Public Warehouse classification. Thus the more than fifteen hundred trucking concerns that received in total in the year 1935 about twelve and one-third million dollars revenue from public warehousing operations would have that revenue included in the Census section on Motor Trucking For Hire. Similarly, the one thousand manufacturers of ice who did some cold storage business incidental to their manufacture and sale of ice would have the three and one-half million dollars derived from this operation listed in the Census of Manufactures for 1935 rather than in the separate section for Public Warehousing.

The number of public warehouse establishments was stated earlier, and it was seen then that farm products warehouses were by far the most numerous. In the all important revenue comparison, however, the four types of warehousing previously enumerated were divided rather evenly in the year 1935. General merchandise warehousemen were most important earning 29.7 per cent of the total revenue, followed by cold storage with 27.6 per cent, farm products with 23.1 per cent, and last, household goods warehousemen received 19.6 percent of the total revenue. A summary of the above data by kinds of warehousing is given in Table A, page 10 (1)

1. The material in this section was taken primarily from a reprint from the 1935 Census of Business, Public Warehousing, pp. 1-4, United States Department of Commerce, Washington, D.C., March, 1937



C. Location of Warehouses

1. Farm Products

As could be expected, there is a considerable concentration of farm products warehouses in the agricultural cotton and tobacco sections of the South.

Citing Census figures again, the South Atlantic and South Central regions accounted for 62.5 per cent of the number of establishments and 63.0 per cent of the total revenue of all farm products public warehouses in 1935. In the North and West, much of the warehousing of grain is either private storage or done in connection with wholesale operations of assemblers. Thus it is not included in the Census of Distribution. (1)

2. Household Goods

Household goods warehouses are primarily, and in many cases entirely, engaged in the storage of personal property rather than merchandise. Property stored in these warehouses ordinarily remains there for a considerable period of time. Warehouses of this type are located in all of the larger cities and in many of the smaller ones. Since they are inconsequential as far as actual distribution is concerned, reference is made to them here only to make clear to the reader the difference between the various types of public warehouses.

1. Department of Commerce reprint, op. cit., p. 5

3. Cold Storage

Cold storage or refrigerated warehouses are for the storage of perishables. Cold storage space is available in nearly all states, but there is a noticeable concentration in Illinois and New York. A further concentration is noticeable on the Pacific Coast, particularly in Washington. As far as total available cold storage space is concerned, the leaders in order are: Illinois, New York, Washington, Kansas, Iowa, and California. (1)

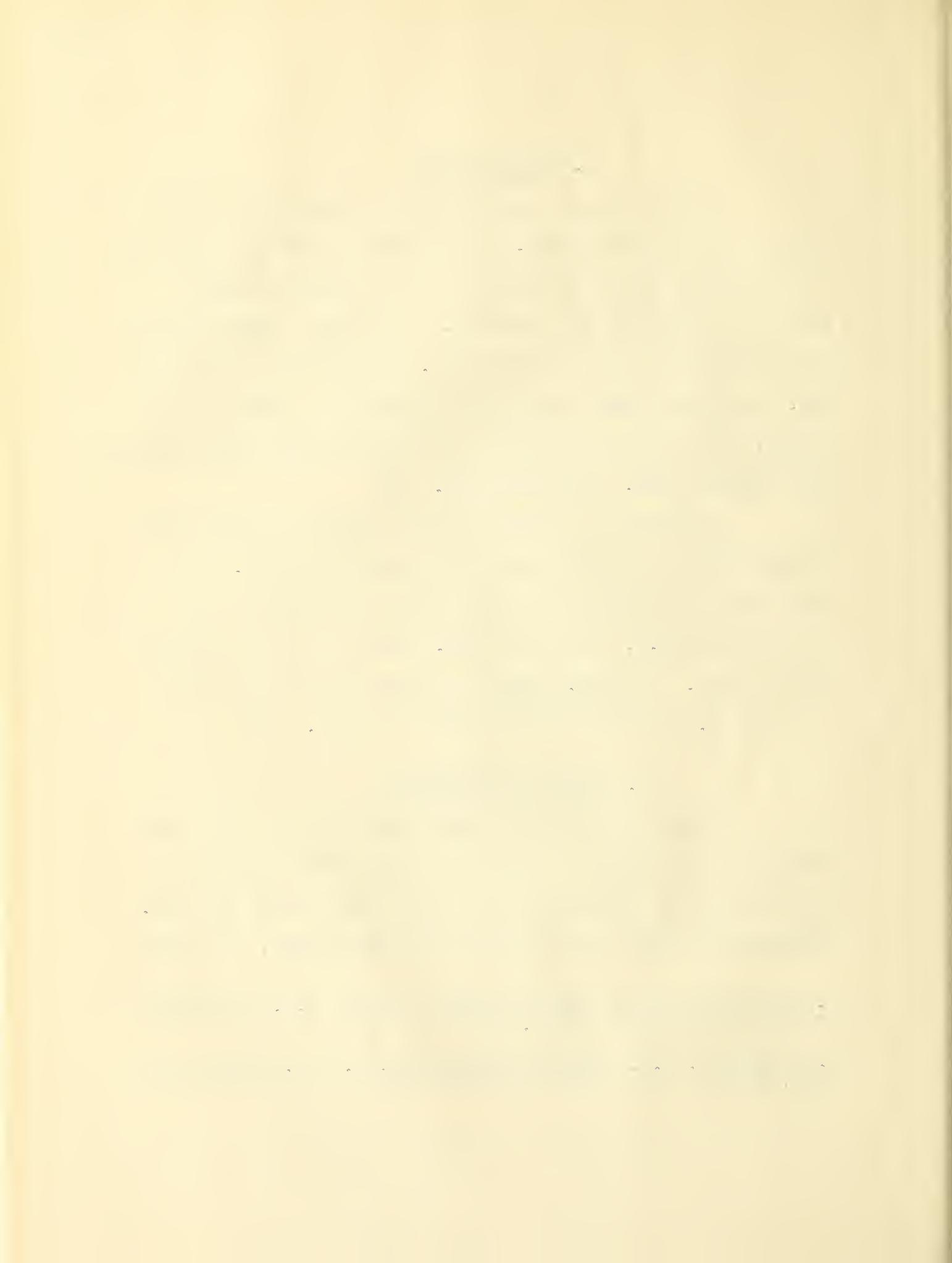
According to Frederick, the tendency in the cold storage field is toward continued decentralization. He says that cold storage warehouse space in sixteen large cities in the U.S. in 1922 was 60.5 per cent of the United States total. In 1937, space in twenty-four large cities was only 53.3 per cent of the total operated. (2)

4. General Merchandise

General merchandise warehouses are probably best defined as distribution warehouses since goods ordinarily do not remain in these warehouses for long periods of time. Warehouses of this type deal in, or rather store, all kinds

1. See Refrigerated Warehouse Space Survey, U.S. Department of Agriculture, Washington, 1938

2. Frederick, J.H., Public Warehousing, p. 124, Ronald, New York, 1940



of merchandise not needing the special services offered by the cold storage warehouse.

The American Warehousemen's Association claims general merchandise members in nearly every state in the union as well as Hawaii, Cuba, and Canada. Facilities appear to be adequate to meet the demands of the major trading areas of the country. There is some evidence that facilities may not be completely adequate in such areas as New Jersey and Indiana where 97 per cent of the existing facilities were being utilized in July of 1948. (1) This leaves little excess capacity for manufacturers and distributors wishing to utilize public warehouses in these locales. Whether this is a temporary condition caused by postwar conditions or a situation needful of correction remains to be seen. In the case of Indianapolis, at least, it would appear that new facilities are in order since present space has been better than 97 per cent occupied since 1940. (2)

D. Summary

In this section, a pseudo-introduction to the warehouse industry was attempted. The different interpretations of the various states in decreeing just what is a public ware-

1. See monthly Department of Commerce bulletin, Public Merchandise Warehousing.

2. Detailed Space and Occupancy information on public merchandise warehouses will be found in Appendix B.

house were mentioned, and it was decided that a public warehouse "is a concern which holds out to the general public storage space for hire".

Public warehouse revenue, and the apportionment of that revenue was then considered. According to Census figures, there were a few more than three thousand public warehouse concerns in the United States in 1935. Farm products warehouses comprised 43.0 per cent of this total, general merchandise warehouses 23.0 per cent, household goods 21.5 per cent, and cold storage warehouses 12.5 per cent. Insofar as revenue is concerned, the general merchandise warehouses were most important, earning 29.7 per cent of the total; farm products warehouses were next with 23.1 per cent, and the household goods warehouses received 19.6 per cent of the total revenue.

The discussion then turned to the location of the different types of warehouses. In the case of the farm products warehouses, it was seen that there was a considerable concentration of this type in the South Atlantic and South Central regions of the United States. Household goods warehouses were then mentioned, and it was seen that these warehouses are engaged primarily in the storage of personal property rather than merchandise. This type of warehouse is found in all of the larger cities in the United States, and in many of the smaller ones. Cold storage warehouses, for the storage of perishables, were then considered. It was seen that there

was a considerable concentration of these warehouses in Illinois and New York with a further concentration noticeable on the Pacific Coast. The trend in the cold storage industry is toward continued decentralization of cold storage warehouses. The general merchandise warehouse, the distribution warehouse, was then mentioned. This type of warehouse is now found in every state of the union. Existing facilities were partially examined, and it was seen that there may be a shortage of facilities in certain areas.

III. TRANSPORTATION AND WAREHOUSING

A. General Considerations

In 1929, about thirteen cents out of every dollar spent on finished goods went for transportation. (1) If the public warehouse can aid in reducing this figure, then an effective argument can be presented for its continued existance.

The business man who decides to use public warehouse facilities in preference to erecting and operating his own private facilities, expects the warehousing firm to do as good or better job of warehousing than his own firm could do. And, in addition, the warehouseman's customer expects the warehouse to do this job more cheaply than the individual firm could. If the warehouseman could not perform the job as efficiently at a lower cost, then there would be no incentive for the individual private firm to use public warehouse facilities.

The most dramatic saving cited by warehouseman in selling his particular form of service is that which can accrue to the business firm by making carload shipments rather than less-than-carload. Whether this is the most important service offered by warehousemen is a matter of conjecture; yet, it is certainly worth perusal.

1. Does Distribution Cost Too Much?, New York, The Twentieth Century Fund, 1939, p. 211.

Since in later sections the discussion will turn to the relation of warehousing and the manufacturer or distributor's selling activities with such things as "spot stocks", hand-to-mouth buying, nearness to consuming markets, maintenance of spare parts stocks, etc., being studied, a discussion and clarification of the transportation function would appear to be the logical starting point.

At the outset, perhaps a few definitions will help to make what is to follow more understandable. Although definitions are per se uninteresting items, in order to communicate ideas a meeting of minds is necessary. Definitions enable that meeting to be on common grounds.

The reader of course knows that the carlot (c.l.) freight rate is always lower than the less-than-carlot (l.c.l.) rate. Because of this spread, and because the unit of purchase of a customer in distant markets is often less than the carlot minimum weight allowed by the carrier, the l.c.l. rate charged against a small shipment would serve to exclude a manufacturer from competing in distant markets against a manufacturer located much closer to those markets.

B: The Pool Car

As a means of overcoming this disadvantage, a system of pool-car distribution was devised whereby the manufacturer would pool orders from several customers in a single city or small trading area. A pool-car would be

made up where the total tonnage of a single class of freight was sufficient to make up a full car. The manufacturer would consign this car to a cartage company or distribution warehouse which would receive the car and redistribute the orders to the various customers. The savings earned by shipping c.l. instead of l.c.l. ordinarily would be more than sufficient to pay for the distributing and perhaps storage costs in the receiving market.

C: The Freight Forwarder

Because many manufacturers still were unable to make up a full car to certain consumer markets, a specialist known as the freight forwarder came into being. "The freight forwarder is a specialist who receives package freight from shippers and assumes responsibility for making the necessary transportation arrangements to get the merchandise to its destination. Merchandise is received from inbound carriers or trucking companies, as well as from local shippers; classified according to destination along various routes; and loaded into consolidated cars. The rate assessed against the entire contents of the car is the carload rate of the highest highest rated article in the car." (1) Ordinarily, the rate charged by the forwarder is more than the c.l. charge but less than the l.c.l. charge. Thus, in effect the freight forwarder

1. Duddy and Revzan, op. cit., p. 40

widens the penetration areas for distributors using his services.

D: The Transit Privilege

Possible savings through the use of pool and consolidated cars will be discussed shortly, but first there is one additional point on which public warehouses sell their services. This is the "transit privilege". "Transit is the practice of shipping a quantity of a specified commodity from point A to point B, there subjecting it to some manufacturing or commercial process and reshipping it to destination C at a rate less than the combination of local rates to and beyond B which would be applicable in the absence of the transit provision." (2)

Perhaps a diagram would best illustrate the point.

Suppose a manufacturer at point A is competing with another producer at point X. Manufacturer A because of a shortage of storage facilities at his own plant has been forced to utilize storage facilities at point B. Manufacturer X on the other hand has adequate storage facilities

2. Ibid., p. 36, quoted from Freight Traffic Red Book

at the point of production, and consequently ships to the consuming market at a forty-five cent per hundred pounds through rate. Manufacturer A, if he were forced to pay a combination of the two local rates would be paying fifty-five cents per hundred pounds freight to get his goods to market in this instance. With the transit provision in effect, however, manufacturer A would pay a rate less than the combination of local rates; perhaps the rate would be exactly the same as that of manufacturer X. Thus, instead of being at a disadvantage, manufacturer A would be paying the same freight rate as X with the additional advantage of having his goods stored nearer the point of consumption. The obvious advantage of quicker delivery of orders by A is only one of the repercussions of this privilege. (1)

E: The Public Warehouse Versus The Freight Forwarder

At this point, it would probably be best to return to a discussion of the public warehouse and the freight forwarder. Each of these institutions offer a definite service

1. Maynard, H.H. and Beckman, T.N., Principles of Marketing, Ronald, New York, 1946, cite the following examples on page 429 as common utilization of the transit privilege: cotton unloaded at a large city en route to be classed or graded by experts; apple and citrus fruits placed in cold storage in the Middle West or East and then shipped on to more distant markets; corn is ground into corn meal, cracked corn, etc., wheat into flour, middlings, bran and even packaged as breakfast food and all are still shipped through under the through rate. A time limit is ordinarily set, but in certain cases it may be as long as two years.

to the distributor, and both offer that service with the same selling appeal.....savings. As an example of the saving which can come through shipping by carload rather than less-than-carload, consult Table B on the following page.

Since the freight forwarder and the public warehouse both are organized in this instance to offer a savings on transportation charges, why should a manufacturer or distributor choose one over the other?

Essentially, the methods of operation of the two are different as they have designed their operations to meet the needs of two distinct types of shippers. The public warehouse is primarily a receiving agent for pool-car shipments. Ordinarily, the shipper will see to it that the carload is loaded at the producing point and will have the car consigned to a warehouse in the receiving market. At the receiving end, the public warehouse will receive the pool-car and redistribute its contents to the buyers of that carload in the receiving market. Obviously then, for a manufacturer to utilize a pool-car method of shipment, he must have enough customers at the point of destination to buy the carload quantity contained in that car.

The freight forwarder, on the other hand, relies mainly on consolidated car shipments. It is the freight forwarder's function to consolidate many small shipments into one consolidated freight car, and then ship those goods to

TABLE B

From	L.C.L. Rate per 100 Lbs.	C.L. Rate ¹ per 100 Lbs.	Warehouse Dist. Charge	Total C.L. Rate Plus Dist. Charge per 100 Lbs.	Savings per 100 Lbs.	Savings per Carload
Chicago	\$2.86 ²	\$1.14	\$.20	\$134.00 ²	\$1.52	\$608.00
St. Louis	2.53 ²	1.01	.20	121.00 ²	1.32	528.00
Milwaukee	2.97 ²	1.19	.20	139.00 ²	1.58	632.00
Detroit	3.09 ³	1.24	.20	144.00 ³	1.63	660.00
New York	3.74 ³	1.50	.20	170.00 ³	2.04	816.00
Philadelphia	3.66 ³	1.46	.20	166.00 ³	2.00	800.00
Boston	3.91 ³	1.56	.20	176.00 ³	2.15	860.00

¹ 40,000 lb. carload minimum.² SWL 133S-251B.³ SWL 252B.

An Example of the Savings Resulting from Pool-Car Distribution of Alcoholic Beverages in Cases or Cartons to Houston, Texas

Source: Marketing Handbook, Nystrom, P.H., ed., Ronald, New York, 1948, p. 998

market. Whereas the pool-car contains all one type or class of merchandise, the consolidated car contains many different kinds with the rate charged being that of the carload rate of the highest rated article in the car. In most cases, pool-car savings will be greater than those resulting from shipment via consolidated car.

However, as can be seen by the method of operation of both the freight forwarder and the public warehouse, ordinarily the needs and size of operation of the individual firm will decide which of these two institutions should be utilized. Where the manufacturer or distributor has a choice, or...to word it a bit better...where either the freight forwarder or public warehouse can handle his shipments equally well, then that manufacturer or distributor had best turn to the public warehouse since almost inevitably greater savings will result. Greater savings will result because the public warehouse depends on its storage operation for its revenue while the freight forwarder must derive his revenue from the spread between carlot and less-than-carlot shipments. Since the public warehouse offers pool-car handling as a non-profit service (which, incidentally, many warehousemen claim they lose money on), the expense-conscious shipper may take advantage of this service (1)

1. Nichols, C.E., "Pool Cars are Problem Cars", Distribution Age, November, 1946, pp.

Of course, there are certain public warehouses who may not because of inefficiency be able to compete with freight forwarders in the matter of rates on a given shipment. Ordinarily, however, with the freight forwarder and public warehouse each operating at the same degree of efficiency, the rates charged by the public warehouse will be less.

As far as storage in transit is concerned, many shippers use this privilege granted by the carrier primarily to finance their goods inasmuch as it is much easier to finance inventories when they are located in a public warehouse than when they are located in the producer's factory. Only cursory mention of this point is made here, however, since the subject will be more thoroughly treated under the sections given over to Sales and Finance. For an example of savings in freight charges which can result through use of this privilege, consult Table C on the following page.

F: Criteria In Selecting A Public Warehouse From A
Transportation Standpoint

1. The distance from the factory to the warehouse.
2. Carload freight rates from the factory to the warehouse, which may at times involve a combined rail and water rate.
3. The less-than-carload freight rates from the warehouse to customers, including the possibilities of using a motor truck service.
4. The less-than-carload freight rates from the factory to consumers, again with a consideration involving the possible use of motor trucks.

TABLE C

From Jackson, Miss. to	Local Freight to Memphis	Local Freight from Memphis	Total Local Freight Combination	Through Rate Origin to Destination	Savings per Cwt.	Carload Savings
Chicago	\$.20 1	.29 4	\$.49	\$.35 5, 4	\$.14	\$62.00
Columbus .....	.20 1	.40 3	.60	.50 3	.10	40.00
Detroit .....	.20 1	.43 3	.63	.53 3	.10	40.00
Baltimore .....	.20 1	.53 2	.73	.58 2	.15	60.00
New York .....	.20 1	.57 2	.77	.61 2	.16	64.00
Boston .....	.20 1	.61 2	.81	.64 2	.17	48.00

¹ Tariff 764B—I.C.C. 933.² Tariff 441—I.C.C. A800.³ Tariff 450F—I.C.C. 3636.⁴ Tariff 778C—I.C.C. 992.⁵ Min. Wgt. 45,000 lb.

[REDACTED] Savings in Storage-in-Transit Rates on Cotton Linters, 40,000-lb. Minimum, at Memphis, Tennessee

Source: Marketing Handbook, op. cit., p. 999

5. The transit time of less-than-carload freight from a warehouse to final destination as compared with the transit time from the factory to the final destination.

6. The warehouse charges. (1)

In selecting a public warehouse to serve a particular consuming area, the manufacturer in a sense has to prepare a break-even chart. Two costs must be equated. One would be the costs of shipping small orders directly from the factory to the customer. This cost would be the less-than-carload cost per hundred pounds between the shipping and receiving points. On the other side of the ledger would be the cost of shipping through a general merchandise warehouse: the carlot freight rate from the factory to the warehouse; the less-than-carlot or motor truck rates from the warehouse to the customer; and, the warehouse charges. In every area served by a public warehouse, eventually an outer limit will be reached where these two costs will be equal. That outer limit then would be the break-even point for that warehouse and that particular manufacturer in the proposed scheme of distribution. In choosing a public warehouse purely from a transportation standpoint, it would appear to be obvious that the manufacturer must prepare a break-even chart of this sort in determining which warehouses, if any, fit into his particular pattern of distribution.

1. Taken mainly from Frederick. J.H., Public Warehousing, p. 59, Ronald, New York, 1940.

G: Summary

Because of the significant cost of transportation in the consumer's distribution bill, it was decided that a discussion of transportation would be a logical starting point in adjudging the worth of the public warehouse.

At the outset, it was stated unequivocally that the business man who utilizes public warehouse facilities does so firm in the expectation that the warehouse concern will do a job as good as the individual firm possibly could do, and the business man further expects that the warehouse concern will do that job at a lower cost.

Because of the spread between carload and l.c.l. freight rates, the pool car and the consolidated car came into being. The freight forwarder, a specialist in receiving package freight from shippers and routing it to its destination, came into being to take advantage of this spread in railroad rates. In a comparison of the freight forwarder and the public warehouse, it was shown that while the handling of the pool car and the consolidated car gave the freight forwarder his profit, the public warehouse ordinarily offers such handling as a cost service (which many warehouses claim they lose money on).

The transit privilege, "the practice of shipping a quantity of a specified commodity from point A to point B, there subjecting it to some manufacturing or commercial process

and reshipping it to destination C at a rate less than the combination of local rates to and beyond B which would be applicable in the absence of the transit provision", was then discussed.

Specific criteria in selecting a public warehouse from a transportation standpoint were then listed. It was shown that a shipper must prepare a break-even chart to determine the worth of any particular warehouse from a transportation standpoint.

IV: THE PUBLIC WAREHOUSE AND THE SALES FORCE

A: The Scientific Approach

In keeping with the modern trend towards a scientific approach to distribution costs, the functions of the traffic manager and the sales manager are no longer separate. Rather, the two have allied their efforts in an attempt to lower the costs of distribution.

No matter how the subject is viewed, in the last analysis public warehouses are used by a given firm because these warehouses enable the firm to do a more effective distribution job at a lower cost. Reducing costs, however, is not the function of any one executive; rather, it is a task which requires the close cooperation of all top management. An example of this cooperation is found in the close alliance of the traffic manager and the sales manager.

Reducing transportation costs is a noble goal, but if such reduction in dollar costs is exacted at the expense of the effectiveness of the sales force.....then indeed there would be a true example of penny-wiseness and pound-foolishness.

It follows quite naturally that the sales manager is cooperating with the traffic manager to protect his own interests. Perhaps there is some altruism being exhibited, but if public warehouses are to be used in a firm's distribution scheme.....the sales manager rightfully wants to know how those warehouses are going to work with his sales force.

Certainly that would seem to be a useful bit of knowledge. Just how effective are these warehouses in working with the salesforce of a given concern?

Actually, the utilization of warehouses for certain types of products is unwise. Also, for manufacturers who have a particular type of distribution, the utilization of public warehouses would be unwise. As an example of this second case, consider for a moment the distribution of a manufacturer of any product who distributes through wholesalers. If these wholesalers purchase in carload quantities and the manufacturer has low cost storage at the point of production, what would be the advantage of storing the goods in a public warehouse?

Consider another case for a moment. Suppose a manufacturer maintained a branch house through which he distributed a product on which the volume could be maintained steadily throughout the year with no fluctuations in inventory. What would be the advantage for this firm in substituting a public warehouse for the branch?

Consider a varied third problem. Suppose there are firms which deal in a great variety of small packages; or firms which market products requiring a great deal of technical knowledge together with services such as fitting, assembling, and so forth; or firms which sell goods of an extremely hazardous or perishable nature. Could these firms

economically use the services of a general merchandise warehouse?

The answer in all the cases considered above is "probably not". Of course, each product and firm would have to be judged on its individual merits and needs, but as a general rule firms falling under the above classifications would not find it to their advantage to utilize the services of a public warehouse concern.

Since certain segments of the business population now have been refused admittance to the public warehouse hostelry, perhaps it is reasonable to assume that all other products may wisely seek accommodations there. The fact is that practically all other types of merchandise can be, and are, stored in public warehouses throughout the country. Even some of the supposedly excluded products are stored in public warehouses because of the needs and aims of the firms manufacturing and distributing these products.

Why is this so?

B: Spot Stocks

Previously it was shown how general merchandise warehouses can aid in reducing transportation costs. That in itself is a powerful argument in inducing manufacturers to ship their goods to public warehouses in the receiving market. The maintenance of "spot stocks" in various consuming markets is another reason.

"Spot stocks is a term used to designate a stock of goods set aside for a particular market and stored nearby so as to expedite delivery to retailers." (1)

Ordinarily, those manufacturers who are selling direct to the retailer are the ones who maintain spot stocks. However, with many wholesalers now following the trend to hand-to-mouth buying because of religious concentration on a high turnover figure, some manufacturers have been forced to maintain spot stocks to service wholesale accounts in a given section.

There are two obvious advantages for the manufacturer in the maintenance of spot stocks. One, there is quicker and more accurate information for salesmen of stocks in warehouses available for sale. And two, there is a quicker shipment of salesmen's orders. (2) Quick delivery is an effective selling argument for a salesman dealing with retailers who do not wish to buy in large quantities and yet do not wish to lose any sales by being out of stock on a given item. If one manufacturer maintains a stock of merchandise stored near the retailer thus facilitating reordering while the manufacturer's competitor has to ship from some dis-

1. "Spot Stocks", Traffic Topics, March, 1946

2. "18 Ways Public Warehouse Service Can Ease Distribution Headaches", Sales Management, July 15, 1946.

tant plant location, it is easy to see which manufacturer would have the better selling argument.

Instance after instance can be cited where an advance accumulation of spot stocks at convenient points often saves a market. Frequently, the demand peak for a commodity is seasonal, and this peak may coincide with the time of freight congestion and car shortage. Current shipments loaded at the factory all too often do not reach the market within a reasonable time, and the customer may be forced to substitute. For the retailer this means substituting on his shelves the goods of a competitive manufacturer or processor. For the industrial customer, the product of a nearby manufacturer will be purchased since the industrial consumer can ill-afford to cease operations until a shipment of previously ordered goods arrives by rail.

Modern sales philosophy, in addition, seems to be concentrated on increasing the rate of inventory turnover. There are, of course, two ways of accomplishing this. One, is to increase the sales volume while maintaining the same average stock. Or, another would be to decrease the size of the average stock while maintaining the same sales volume. Since the second method is ordinarily more easily accomplished than the first, this is the area in which turnover efficiency can best be improved. The obvious step then is to reduce the stock to a bare minimum.

The consumer, the retailer, the wholesaler, each in turn, carries less goods on hand than was formerly the case. Thus the reservoir of finished goods instead of moving towards the consumer has been pushed back until more and more the manufacturer is the one who must provide for its storage. It is not a case where the manufacturer has a choice. If he wishes to maintain his markets it is a necessity.

Since for all but the large-scale user small-lot buying promotes the greatest profits, there is little hope that its prevalence will decrease in the coming years. Rather, a case can be made for its continued spread. There may be a social question as regards the relative efficiency or inefficiency of small-lot versus large-scale buying, but that question can not be solved here. There is no point in arguing riddles, one can only recognize what is so.

Although the trend is decidedly towards small-lot buying, this trend has been accompanied by the demand that the manufacturer, grower, or distributor make quick deliveries. The days of stocking up three or four times a year are gone. Few retailers and industrial users now purchase in advance of requirements. Nevertheless, they want those requirements to be met. Competition among makers and sellers has contributed to the growth of small-lot buying. Now this bastard child has grown to full size, and manufacturers have

been forced to strategically warehouse their goods in all the main commercial and distributing centers in order to hold their markets. Since quick delivery is a prime selling appeal, in order to back up the salesman's efforts quick delivery must be an actuality.....not merely a promise.

C: Warehouse Selection From the Sales Standpoint

Since indiscriminate selection of warehouses can never be advocated, Frederick suggests that the sales manager or traffic manager might well seek the answers to the following questions when selecting a warehouse from the sales standpoint: (1)

1. Are present customers in the territory purchasing as much of the product as they can use?
2. If not, is it because they do not anticipate their needs, and so are forced to buy locally in emergencies?
3. If customers are securing a portion of their requirements from local sources, are they putting a competitor's goods on their shelves (if retailers), or into production (if industrial users), thus opening the door to competition which will make further inroads into present volume?
4. If competition is gaining a foothold by the means just mentioned, is it not logical that the situation should be met by well-placed stocks, in this way protecting present sales volume?
5. If spot stocks are placed in the territory under survey, what may be expected in increased volume from present customers and what amount of new business may be anticipated.

6. If customers buy competitive products locally only to fill emergency orders, is it not reasonable to conclude that they will adhere more closely to the manufacturer's product if a stock is placed convenient to them?

7. If there are buyers in the territory who have not been sold because of slow deliveries, is it not a fact that a warehoused stock would eliminate this obstacle and enable the manufacturer to compete on a favorable basis for the business?

8. Will the spot stock give more volume on the long-profit items, or is the manufacturer now getting the cream of the local volume?

9. Will a spot stock merely throw the manufacturer a bigger volume of the high competition items in a line (the low-profit items)? Or, can a spot stock be used to induce dealers to carry the whole line instead of a few fast-selling items?

10. What will be the attitude of wholesalers or distributors towards the spot stocks? Will they welcome them as an aid, so that they will not need to invest so much in inventory, or will they condemn them as making it easier for small competitors to obtain the manufacturer's goods at wholesale?

In addition to a consideration of the above points, many traffic managers and sales managers also consider the percentage of a stock spotted in a given city or town which will be absorbed by dealers in that city or town. Ordinarily, it is felt that such dealers should absorb about fifty percent of the warehouse stock. If this is not the case, then shipping through a merchandise warehouse is liable to be prohibitive since the company must consider the costs listed in the section devoted to transportation: the car-load cost from the factory to the warehouse; the warehouse storage, handling, and reshipping charges; and the less-than-carload

rate from the warehouse to the ultimate destination.

D: Accredited Lists

A valuable adjunct to the maintenance of spot stocks is the accredited list. Since public merchandise and cold storage warehouses frequently act almost as a branch-house for a manufacturer, it is not unusual to find these organizations doing practically everything the producer himself would do in the physical distribution of the product. Everything but sell.

The accredited list is nothing more than an approved list of credit customers authorized by the storeroom. The warehouseman follows this list in releasing goods to industrial users, wholesalers, and retailers up to authorized credit limits without waiting to have the storeroom's office approve the order.

There are definite advantages other than a saving in time which can accrue from the use of this accredited list system. First class credit risks invariably try to maintain their credit standing and stay on the warehouse accredited list so that they may obtain quick delivery of the goods they want at the time they want them.

The poor credit risk, curiously enough, is also aided. For with stocks close at hand he can buy the goods he needs in small quantities comfortable in the feeling that there is an adequate stock near at hand to meet any unusual

demand that may arise. The poor credit risk need not, then, purchase in quantities larger than the size of his business justifies. Thus both he and the manufacturer are saved time and possible embarrassment.

E: Spot Stocks Versus Consignment Selling

The advocates of increased use of public warehouses oftentimes compare spot stocks with consignment selling. Certainly, if the manufacturer has a choice in selling through a spot stock set-up together with an accredited list system as opposed to straight consignment selling, there is little doubt about which is safer for the producer. When selling through general merchandise warehouses, title remains in the hands of the seller until the goods leave the warehouse. Selling on consignment, title remains in the hands of the seller until the retailer sells the goods in question. This fact has left the way open for such things as deferred sales reports and delayed payments for goods sold by wholesalers and retailers. When public warehouses are utilized, goods are not withdrawn from the warehouse until the wholesaler or retailer has an actual need for those goods. The manufacturer's sales figures consequently are not overstated since goods are not withdrawn from the warehouse merely to sit on the dealers' shelves. Thus, if selling on consignment is done through the medium of the merchandise warehouse, the warehouse will report directly to the manufacturer when goods

are withdrawn. Therefore, the manufacturer will have a much closer check on his outlets as well as a much better idea of the true sales figures of his goods.

F: Sales Service Of The Public Warehouse

Although some general merchandise warehouses have organized a sales organization as a subsidiary to their storage operation, it is not the true function of the public warehouse to act as a demand creation instrument. However, in line with their policy of granting every service necessary to their customers to secure business, the businessman can rightfully expect further cooperation of the general merchandise warehouse with the selling function of his firm.

The warehouses seem willing, even eager, to grant this cooperation. Many warehouses provide office space for the manufacturer's sales staff, stenographic help is supplied if wanted, mail is received and sent for the manufacturer, warehouses take orders from the home office, salesmen, or customers, they mark or ship goods under the manufacturer's label, provide store-door delivery where wanted, report all shipments and deliveries as made, provide a stock report at the end of each month and provide many other services. Many warehouses can and do supply local jobbing lists, dealers' lists, and help the manufacturer in other ways with their knowledge of local conditions and prejudices.

Public warehousemen have even evidenced a willing-

ness to aid the manufacturer in securing sales representation. Many warehousemen are acquainted with manufacturer's agents whom they will recommend to clear out remnants of a customer's stored goods from time to time. There seems to be a trend for many sellers who distribute through warehouses to make increasing use of these manufacturer's agents. As the reader knows, a manufacturer's agent usually covers a more or less limited territory for a manufacturer with exclusive rights to that manufacturer's product in that territory. Ordinarily they will handle allied but non-competing lines. The manufacturer's representative is usually happy to have a spot stock near at hand from which orders can be shipped, and in many cases this type of individual is supplanting the manufacturer's regular sales force since many producers have come to realize that the general merchandise warehouse and the manufacturer's agent seem to supplement each other very well.

G: An Impetus To The Sales Force

Although it may seem a minor point, to sales managers it may not be. Some sales managers claim that spot stocks psychologically spur a salesman on. If the salesman is working in a consuming market where spot stocks are located, there is a tendency for the salesman to produce more business. And by this it is meant more business than could reasonably be expected from the added selling point

the salesman now can use. And, curiously enough, the salesman's efforts seem to vary directly in proportion to the amount of stock on hand. If there is a large amount of stock in the warehouse, the salesman gets out and secures orders. If there is only a small amount on hand, the salesman seems to let up on his efforts because not so many orders are forthcoming.

An expert in sales management would have to examine this point. The feeling is prevalent among warehouse operators and sales managers of firms distributing through public warehouses, however, that it is so.

H: Summary

A survey of warehousing from the sales standpoint has been made. Such things as small-lot buying, concentration on turnover, and the effect of spot stocks on these practices have been discussed. An outline of the services offered by warehouse concerns and a qualification as to what types of concerns could profitably use warehouse facilities have also been discussed. Selection of warehouse locations from a sales standpoint and its possible effect on markets has been tied in with previously discussed transportation factors. In addition, the intermeshing of the salesforce with the public warehouse concern has been evaluated. To tie these various factors together giving to each its proper weight can be done only by the individual firm with proper consider-

ation of its own individual problems. None of the factors discussed in this section, however, should be overlooked.

V: THE PUBLIC WAREHOUSE AND THE INDUSTRIAL MARKET

A: Consumers' Goods versus Industrial Goods

Many businessmen and even many public warehouse operators are prone to think of the public warehouse only in connection with nationally distributed consumers' goods. Yes, it is true that the majority of public warehouse revenue comes from the handling of consumers' goods, and it is probably true that the original impetus was given to the industry because of the distribution needs of consumers' goods producers. However, such commodities as drill presses, drying ovens, batteries, conveyors, crucibles, grinding wheels, lathes, chemicals, cleaning compounds, lubricating oils, tar, plastics, lumber, cocoa beans, paper, copper, aluminum, tin, crude rubber, and many other industrial necessities are now being stored in public merchandise warehouses. (1)

B: Spot Stocks and the Industrial Market

Probably spot stocks and their maintenance provide the major motivating reason for industrial goods manufacturers who use public warehouse facilities. Certainty of quick delivery of raw materials and parts is vitally necessary to

1. Long, W.H., "Marketing Industrial Units Through Public Warehouses", Distribution Age, August, 1946

the industrial concern for a variety of reasons. For the retailer, a delayed shipment means only that he will lose a few sales of the delayed commodity. And, in his case, there is the possibility that he may suggest a substitute product to his customer. The industrial consumer, on the other hand, must have fabricating materials and parts supplies when they are needed. Waiting means a hampered or closed down operation and lost money.

As a means of competing with more favorably located competitors, many manufacturers have established spot stocks in their major consuming markets. A New England manufacturer whose most important customers were located in the Detroit or Chicago areas might well strengthen himself in those markets if he maintained a stock of his products in warehouses close to the point of consumption.

An example of storing near points of consumption is offered by the can manufacturers. Because many of the fruits and vegetables which are packed in cans are extremely perishable, many can companies have taken up the practice of maintaining spot stocks in canning areas during the canning season. Thus, the packers can devote their entire space to packing without giving over a great deal of space to the storage of empty cans. Certainly the can companies providing such services have a decided sales advantage over competitors who do not.

In addition to raw materials, machinery, and parts which go to a consuming plant for final assembly, there is another variety of industrial products being marketed through general merchandise warehouses. Lubricating oils, cleaning compounds, chemicals for use in factory processes, and many other products of like category are being distributed through public warehouses. In almost every case the reason for the maintenance of these spot stocks, in addition to the possible savings on transportation cost, is the added selling point which the salesman has in calling attention to the stock of his product stored nearby.

C: Parts Warehousing

Some warehouse concerns engaged in the storing of industrial goods have gone even further than a warehouse concern ordinarily would be expected to go. It is customary to think of the warehouse as handling unbroken packages, both receiving and shipping. For most warehouse concerns, the only broken packages around are those that have been broken by accident.

There has been an outgrowth of industrial "spot-stocking" which, in reality, sets up the public warehouse as a branch house for the manufacturer. These warehouses contract to receive the manufacturer's product, break packages, and ship the product out to customers as needed. For example, one warehouse acts as a parts supply house for a

Neon distributor. It receives all the various minute supplies needed for the installation and maintenance of Neon lights in carload lots. The packages after being received are broken down and placed in special bins built for the purpose. Orders are usually mailed directly to the warehouse. The warehouse receives the order, fills it, ships the goods, makes out the invoice, and collects the money. (1)

Another example of parts warehousing which has been trumpeted far and wide by the warehousing industry was provided by a Spokane, Washington warehouse which handled Diesel locomotive parts during the war. When news arrived that a Diesel locomotive had broken down as far as 150 miles from the warehouse, a warehouse truck would be immediately dispatched to the scene with the necessary parts as well as a railroad man to make the necessary repairs.

However, the businessman should think of this dealing in individual items rather than unbroken packages as a premium service which all warehouses are not prepared to give. Dealing in unbroken packages is the usual procedure, and where premium service is given a premium price will be charged.

Nevertheless, for a producer who wishes to establish a parts supply house relatively inexpensively and quickly, the services offered by warehouse concerns might well be

1. Frenzel, P.W., "Doctors of Distribution", Storage and Distribution, April, 1947

examined.

D: Display Services

Many warehouses have inaugurated display services, a sales aid not ordinarily available to the marketer of industrial products. A potential customer may have been given all the specifications, pictures, performance claims, prices, etc., on a given piece of equipment, and yet not be sure of the model he would like to order. The salesman, if there has been a working arrangement made with the warehouse concern, may bring the client to the warehouse to examine the different models. One warehouse, storing the goods of a stoker manufacturer, even went so far as to show prospective customers how that stoker worked inasmuch as the warehouse was using the same type of stoker as a heating unit.

E: Summary

While the vast majority of the storing done by the warehouse industry is concerned with consumers' goods, the storage of industrial goods is becoming more important. Many warehouse concerns have recognized that here is the logical area for them to increase their business, and they have offered a number of inducements to marketers of industrial products. Since it is to the interest of both the warehouseman and his patron that sales of the stored product be as large as possible, the warehousemen currently are

endeavoring to service their clients as efficiently as possible. If the warehouse can supply a selling aid in the form of delivery, display, and so forth, they have evidenced a willingness to do so. This is so, simply because warehousemen realize that prosperity for their patrons means prosperity for them.

VI: TAXATION OF WAREHOUSED GOODS

A: Taxation, A Service Of Warehousing?

Why should taxation, the bane of mankind, be included in a discussion of the services of the public warehouse? In answer to this question, two things can be said. On the one hand, if the warehouses are to be considered as an integral part of a manufacturer's scheme of distribution, then certainly that manufacturer would wish to know how the selection of a given warehouse is going to affect him tax-wise. On the other hand, because of the way various states have designed their tax laws, it is legally possible for a manufacturer in certain cases to escape paying an ad valorem tax in any state. Although selection of warehouses ordinarily is not made primarily because of tax laws since sales and competitive conditions are usually considered more important, tax laws seldom can be completely overlooked.

B: Two Types Of Taxation

Taxation of goods in public warehouses ordinarily is of two types. There is first an ad valorem tax levied by most states. This personal-property tax is levied on any merchandise at rest in a state, as of a certain date, regardless of whether it is stored in a public warehouse or a building owned or rented by the owner of the merchandise. Secondly, having stocks warehoused in certain states requires

the owner of those goods to qualify to do business by registering under the state's foreign corporation laws. While this second form is not a direct levy such as the ad valorem tax, its effect is the same since it will serve to increase the manufacturer's costs of doing business in that particular locale.

C: The Ad Valorem Tax

The ad valorem tax is levied on goods stored in general merchandise warehouses (or in the storer's private facilities) in forty-five states. (1) The assessment is usually made in one of the following two ways:

1. The tax is computed on the value of goods in storage on a particular day.
2. The tax is computed on the value of the average stock of merchandise which has been stored in a state for a year preceding some certain date.

The first method is by far the most common, with the majority of states choosing this method. Massachusetts, for example, levies its assessments on January 1st. New Jersey levies its assessment on April 1st, while other states have chosen May, June, July, October, etc.

Under this first method, goods can be shipped into a state shortly after assessment date and stored for several months. So long as the goods are sold or distributed prior

1. See Table D on the following page.

NOTES TO TABLE

(1) A—Assessment based on the *average* stock on hand during the year ending with the date of assessment. B—Assessment based on the *actual* stock on hand on the date of assessment.

(2) First Monday in March.

(3) Stocks in public warehouses between the second Monday in January and the first Monday in April are assessed at 25 per cent of their value, and an additional charge of 25 per cent is made each succeeding quarter.

(4) Storers or warehousemen need report only when requested to do so by assessors.

(5) Rate of assessment varies with location of property.

(6) If warehouse is located in an incorporated town the goods stored therein are liable for state, county, school, and city taxes.

(7) Parish tax.

(8) Second Monday in April establishes the domicile of the property. Assessment may be made any time up to May 1.

(9) Warehouseman is assessed as owner of the property and must collect tax from the storers.

(10) Warehousemen supply assessors with names and addresses of storers only.

(11) Stocks in storage between the first of January and the third Monday in July are assessed. If not placed in storage until after the third Monday in July they are not taxed until after the first of the next January.

(12) Merchandise shipped into Wisconsin and delivered to a public warehouse direct from a railroad or steamship line and stored in the original package is regarded as being in transit and is not taxed while in the warehouse. Merchandise which has not been shipped into the state, even though in the original package, is assessed for property taxes.

(13) Report made to district assessor for district property tax.

(14) Corporations (Foreign and Domestic) having property in only one county in Ohio are only required to file in the office of the Auditor of the county in which the property was held, while those having property in more than one county are required to file Inter-County Returns with the Tax Commission of Ohio.

(15) Reports made to Municipal Board of Assessors.

(16) As a matter of practice stocks are not reported and so not assessed.

(17) No property taxes assessed on stocks of goods stored in public warehouses.

(18) Goods stored for purposes of distribution are not assessed, and goods in transit in interstate commerce are not assessed either.

(19) Goods stored in this state incidental to interstate transportation and not remaining therein more than 90 days are not assessed.

(20) Warehousemen must report only if he is legal agent of storers.

(21) If warehouseman refuses to make a listing of personal property in his possession, assessor makes an arbitrary assessment.

(22) January 1 to April 10.

(23) Fair cash or market value. In the case of merchandise 50 per cent average invoice.

(24) Arkansas law directs that all property subject to taxation be reported to the assessing agency. The penalty for failure to assess within the time prescribed by law is 10 per cent of taxes, if property is discovered and assessed.

(25) All assessments on 100 per cent value except in the city of New Orleans; it is permitted to assess for city tax only on 85 per cent value.

(26) Goods stored in public warehouses by domestic corporations are assessed by the state Tax Commission on January 1. Those stored by foreign corporations are assessed by local taxing authorities at the time set by them. Most of the assessing dates are between March 1 and July 1.

(27) First Monday in March.

(28) As a matter of practice the assessment is usually from 50 to 85 per cent of value.

(29) A warehouseman is assessed as owner of the property and must pay the tax when he is holding goods for profit as the consignee.

(30) Ordinary merchandise and stocks of goods are assessed at 60 per cent of their actual value, while equipment and machinery of manufacturers are generally assessed at 75 per cent of their actual value.

(31) If storers does not report, the warehouseman is assessed.

(32) While no property taxes are assessed on stocks of goods in public warehouses outside of New York City and no such taxes have heretofore been assessed on stocks in that city, the City of New York recently notified all members of the warehouse industry in the Port of New York to furnish them with the names and addresses of their customers for the purpose of assessing an emergency tax enacted and passed by the City of New York in 1933 but never assessed until August, 1939.

TABLE D
STATE PERSONAL PROPERTY TAXES ON STOCKS IN
PUBLIC MERCHANDISE WAREHOUSES

STATE	Date of Assessment	Warehouseman Reports to County or Other Local Tax Officials	Store Reports to County or Other Local Tax Officials	No Legal Requirement for Anyone to Report	Basis of Assessment See Note (1)	PROPERTY TAX ASSESSED FOR:			Tax Based on Per Cent of Value of Stored Stock	See Note Number
						State Tax	County Tax	Local Tax		
Alabama.....	Oct. 1								60	(5)
Arizona.....	Jan. 1	x				x	x	x	100	
Arkansas.....	(22)	x	x			x	x	x	50	(22) (23) (24)
California.....	(2)	x	x				x	x	50	(2)
Colorado.....	Apr. 1	x	x			x	x	x	50	
Connecticut.....	Oct. 1	x	x			x	x	x	100	
Delaware.....	(17)									(5)
Dist. of Col.....	July 1	x	x			x	x	x	100	(17)
Florida.....	Jan. 1	x	x			x	x	x	100	(13)
Georgia.....	Jan. 1	x	x			x	x	x	100	(10)
Idaho.....	(3)	x	x			x	x	x	100	(20)
Illinois.....	Apr. 1	x	x			x	x	x	100	(4) (3)
Indiana.....	Mar. 1	x	x			x	x	x	60-100	(31) (10) (4) (5)
Iowa.....	Jan. 1	x	x			x	x	x	60	(5)
Kansas.....	Mar. 1	x	x			x	x	x	100	
Kentucky.....	July 1	x	x			x	x	x	55-68	(5) (6)
Louisiana.....	Jan. 1	x	x			x	x	x	(25)	(5) (7) (10) (25)
Maine.....	Apr. 1	x	x			x	x	x	100	(15) (4) (10)
Maryland.....	(26)	x	x			x	x	x	100	(10) (26)
Massachusetts.....	Jan. 1	x	x			x	x	x	100	
Michigan.....	(8)	x	x			x	x	x	100	(8) (9)
Minnesota.....	May 1	x	x			x	x	x	33 $\frac{1}{2}$	(5) (21)
Mississippi.....	Jan. 1	x	x			x	x	x	100	(18)
Missouri.....	June 1	x	x			x	x	x	100	(4)
Montana.....	(27)					x	x	x	33 $\frac{1}{2}$	(27)
Nebraska.....	Apr. 1	x	x			x	x	x	100	(5)
Nevada.....	(11)					x	x	x	100	(11)
New Hampshire.....	Apr. 1	x	x			x	x	x	100	(5) (9)
New Jersey.....	(17)					x	x	x	100	(17)
New Mexico.....	Jan. 1	x	x			x	x	x	100	
New York.....	(17)					x	x	x		(32)
North Carolina.....	Jan. 1	x	x			x	x	x	100	(28)
North Dakota.....	Apr. 1	x	x			x	x	x	50	(5)
Ohio.....	Jan. 1	x	x			x	x	x	70	(14)
Oklahoma.....	Jan. 1	x	x			x	x	x	100	(5)
Oregon.....	Mar. 1	x	x			x	x	x	50	
Pennsylvania.....	(17)					x	x	x		(17)
Rhode Island.....	June 15	x	x	x		x	x	x	100	(16)
South Carolina.....	Jan. 1	x	x	x		x	x	x	42	(5)
South Dakota.....	May 1	x	x	x		x	x	x	100	(5)
Tennessee.....	Jan. 10			x		x	x	x	65	(16)
Texas.....	Jan. 1	x	x	x		x	x	x	100	
Utah.....	Jan. 1	x	x	x		x	x	x	60	(20)
Vermont.....	Apr. 1	x	x	x		x	x	x	100	(5)
Virginia.....	Jan. 1	x	x	x		x	x	x	75	
Washington.....	Jan. 1	x	x	x		x	x	x	50	(29)
West Virginia.....	Jan. 1	x	x	x		x	x	x	(30)	(30)
Wisconsin.....	May 1	x	x	x		x	x	x	100	(12)
Wyoming.....	Feb. 1	x	x	x		x	x	x	100	

SOURCE: Frederick, J.H., Public Warehousing,
Ronald, New York, 1940, p. 260

to tax-assessment day, there will be no personal property tax levied.

Warehouse operators commonly advise their clients to reduce their stocks to a minimum by making shipments out of the warehouse just prior to assessment day. Where incoming merchandise is concerned, warehousemen ordinarily will hold the merchandise in transit for a few days until the assessment date has passed. There is nothing illegal about this service.

Under the second method, while it certainly is difficult to avoid payment of the tax, the shipper whose peak season coincides with the assessment date is not penalized as compared with the shipper whose peak season comes at some other time of the year. Under the first method, this second shipper might have so reduced his stock on assessment day that he would have to pay but a token tax, if he had any tax to pay at all.

Manufacturers and other shippers have railed against ad valorem taxes for a considerable period of time, claiming that they were often subjected to double or triple taxation on the same goods. This is not inconceivable. A manufacturer might have to pay an ad valorem tax on raw materials in the state where his producing plant were located. Then, after production of that particular lot had been completed, the goods might be shipped to some central distributing point in another state in time to be assessed for that state's ad

valorem tax. If the goods were then shipped to a third state for spot stock purposes, there is again the possibility that such shipment might reach that state in time for personal-property assessment.

However, while this is not inconceivable, it is hardly probable. Traffic managers ordinarily consider tax assessment dates in scheduling shipments, and it is as possible to completely escape assessment as it is to be assessed for the same goods two or three times.

There has been some agitation for an uniformity of assessment dates throughout the nation, but this agitation has not come to fruition as yet. There is little reason to believe that it shall, since for every adherent of uniform assessment dates there is an opponent who finds the present system to his advantage. Escaping ad valorem taxes is a perfectly legitimate practice, and the public warehouseman is invariable willing to aid his patrons to do so.

D: "Doing Business" In A State

The question of what constitutes "doing business" in a state has been a source of considerable irritation to business and legal men. To completely examine the laws of the forty-eight states to determine why or why not a foreign corporation is doing business in a particular state is not the aim of this discussion.

For the shipper who uses the services of the public

warehouse as outlined in previous chapters, however, in forty-four states he would be considered as "doing business" in the state and would have to qualify under the state's foreign corporation laws. In Delaware, Massachusetts, Minnesota, and Oregon, qualification is not ordinarily required of public warehouse patrons.

In many of the states where qualification is required, it is common knowledge that many of the firms storing goods in public warehouses in those states do not register under the various states' foreign corporation laws. Law enforcement, which allows firms to do business in a particular state without first qualifying, is probably the major cause of this condition. Of course, there are many users of public warehouse firms using them in the belief that they are engaged in interstate commerce. Unfortunately, however, the courts do not share this belief, and the shipper may be liable to penalty for violation of the law.

Ordinarily, warehousemen make no mention of qualification or compliance with a states' foreign corporation laws when soliciting business for their warehouse. Usually, to be on the safe side, they will advise qualification if asked, but they make no insistence on the shipper qualifying.

The penalties for non-qualification are ordinarily heavy. In most states, contracts made in the state by a corporation which has not been qualified to do business in

that state are invalid and unenforceable. In addition, many states levy heavy fines against firms which do business in a state without first qualifying.

For the business firm which is faced with the problem of registering then, although enforcement of the laws may be lax, the penalty for illegal operations may be very heavy.

Of course, the task of choosing merchandise warehouses with the above points in mind brings into focus the problem the business firm has in choosing the states in which it wishes to register. Licenses, fees, regulations, taxes, reports, etc. will have to be considered before choosing locations. Although these considerations are admittedly interesting and important, they constitute a jurisprudential problem which cannot be solved here.

E: Bonded Warehouses

A complete exposition of bonded warehouses is not now to be attempted, but since the subject will not be covered elsewhere.....at least passing mention of this type of warehouse should be made. Basically, there are two main types of bonded warehouses; custom house storage; and, internal revenue bonded storage.

1. Custom house storage. (1)

1. See Haring, H.A., op. cit., pp. 151-158

This form of bonded warehousing is little more than a modification of the general merchandise warehouse. The modification has occurred because of import duties which are levied under the tariff system in existence in the United States. Because of the high costs of accommodating shipping, goods must be discharged from carrying vessels without delay. Since they cannot be stored in transit sheds, they must be warehoused. Unless the duty has been paid, the government is reluctant to lose its control over the goods. Thus, there has been authorized by law a system of bonded warehouses, in which an importer can place his goods in the custody of government officers. The importer must pay storage, but he is not required to pay duty until the goods have been removed from the warehouse for consumption in this country. The importer also has the privilege of re-exporting the goods without paying any duty.

Although these customs bonded warehouses are privately operated, the goods are in the hands of an United States Storekeeper appointed by the Collector of Customs. The Storekeeper alone has access to the stored goods. He has possession of the keys, and the locks used belong to the Federal government. In spite of his official capacity, the expense of maintaining the Storekeeper is nevertheless borne by the warehouseman.

2. Internal revenue bonded storage.

With the exception that the customs warehouse receives its goods from imports while the internal revenue warehouse receives its goods from domestic producers, the operation of the internal revenue warehouse is the same as the operation of the customs warehouse just described. The internal revenue warehouse exists mainly as a warehouse for tobacco products, liquor, and to some extent for oleomargarine and certain taxable proprietary compounds.

Frequently, bonded departments, either internal revenue or customs, are maintained by general merchandise warehouse concerns. Although usually an integral part of the warehouse building, the bonded department ordinarily has a separate entrance and is operated separately because of government regulation.

F: Summary

In this section, the question was first posed as to whether or not taxation deserved a place in a discussion of the services of the warehouse building. It was concluded that taxation cannot be disregarded if warehouses were to be considered as an integral part of a given shipper's distribution program.

Two types of taxation were considered. One, the ad valorem tax, was seen to be a direct tax levied by forty-five states on personal property or merchandise stored in warehouses, whether public or private. The two types of

thinking on method of assessment, i.e., assessment on one day in the year or assessment based on average inventory maintained for a period of a year, were discussed. For the second form of taxation, a pseudo-tax in the form of requiring business firms to register as foreign corporations in states where they stored goods in public warehouses was discussed. It was seen then that forty-four states in most instances require firms using public warehouses in those states to register as foreign corporations.

The lax enforcement of the "qualification" laws was mentioned, and it was stated that many firms are operating in states where they are not qualified to do so. It was also stated that the courts do not consider goods at rest in a public warehouse as part of interstate commerce.

Bonded warehouses were then discussed, and it was shown that they could be either separately operated warehouses or departments within a general merchandise warehouse. The reason for the growth of the two types of bonded warehouses, the custom house storage warehouse and the internal revenue warehouse, was explained by the government's unwillingness to lose control over taxable goods until the duty on these goods had been paid.

VII: FINANCIAL SERVICES OF PUBLIC WAREHOUSES

A: General Considerations

Although the warehouserman's function of providing savings in freight, storage, and insurance for his customers plus the extension of credit on the Accredited List system previously discussed might well be listed as financial services of warehousing, a narrower classification is considered here. The point now up for consideration is how the businessman can turn his inventory into liquid assets. For many manufacturers and distributors, a large inventory represents little more than tied-up capital. Under certain conditions, with the aid of the warehouse operator these frozen assets can be turned into ready cash.

B: The Uniform Warehouse Receipts Act

The Uniform Warehouse Receipts Act was adopted by the National Conference of Commissioners on Uniform State Laws in 1906, and was amended by the Conference in 1922. The Act was written by Professor Samuel Williston, of the Harvard Law School, and Mr. Barry Hohun, of the Washington bar, at the behest of the American Bankers Association and the American Warehousemen's Association. Its purpose was to standardize the use of warehouse receipts in banking, thus facilitating the spread of these receipts as commercial paper.

To complete the background picture, the Federal Reserve Act passed in 1914 made no provision for warehouse acceptance credits. In 1916, however, Section 13 of the Federal Reserve Act was amended to permit Federal Reserve System member banks to accept drafts drawn upon them which were secured by warehouse receipts or other similar documents conveying or securing title to readily marketable staples. Shortly thereafter this amendment was strengthened and further clarified by ruling of the Federal Reserve Board that receipts in order to be discounted must be issued by a warehouse concern operated entirely independent of the borrower.

This ruling, in addition to the previous ones, definitely put the warehouses in the banking business, in large part eliminating the competition which subsidiary warehouse operators might have given.

Although one respected thinker insists that the present system of distribution and finance has been outmoded, or rather "vaporized", by the atomic bomb (1), mere mortals can do little but continue in the traditional way until the new mode of life has been revealed. Accordingly, at this point it is probably best to discuss inventory financing

1. Jordan, Virgil, Manifesto for the Atomic Age, New Jersey, Rutgers, 1946, *passim*.

through the use of warehouse receipts.

Warehouse receipts can be issued for goods in storage as follows:

1. For goods that are actually being stored in a public warehouse.

2. For goods that are being stored on the manufacturer's or owner's premises, but are in the custody of a bona fide public warehouseman.

A warehouse receipt issued for stored goods, according to the Uniform Warehouse Receipts Act, is a written certificate issued by the warehouseman certifying that he has received certain goods for storage, and such goods will be delivered on demand provided the terms of the receipt are complied with. Receipts are of two forms, negotiable and non-negotiable.

C: Negotiable Warehouse Receipts

A negotiable warehouse receipt is, "A receipt in which it is stated that the goods received will be delivered to the bearer, or to the order of any person named in such a receipt.....". (1)

D: Non-Negotiable Warehouse Receipts

A non-negotiable warehouse receipt is, "A receipt in which it is stated that the goods received will be delivered to a depositor, or to any other specified person." (2)

1. Uniform Warehouse Receipts Act, Part I, Section 5
2. Ibid, Part I, Section 4

E: Warehouse Receipt Requirements

Warehouse receipts need not be in any particular form, but every such receipt must embody in its written or printed terms: (1)

1. The location of the warehouse where the goods are stored,
2. The date of issue of the receipt,
3. The consecutive number of the receipt,
4. A statement whether the goods received will be delivered to the bearer, to a specified person, or to a specified person or his order,
5. The rate of storage charges,
6. A description of the goods or of the packages containing them,
7. The signature of the warehouseman, which may be made by his authorized agent,
8. If the receipt is issued for goods of which the warehouseman is the owner, either solely or jointly or in common with others, the fact of such ownership, and,
9. A statement of the amount of advances made and of liabilities incurred for which the warehouseman claims a lien. If the precise amount of such advances made or of such liabilities incurred is, at the time of the issue of the receipt, unknown to the warehouseman or to his agent who issues it, a statement of the fact that advances have been made or liabilities incurred and the purpose thereof is sufficient.

A warehouseman shall be liable to any person injured thereby, for all damage caused by the omission from a

1. The Uniform Warehouse Receipts Act, Part I, Section 2

negotiable receipt of any of the terms herein required.

F: Users of Warehouse Receipts

Ordinarily, the users of warehouse receipts can be divided into two broad groups. Group one would consist of such individuals and institutions as: commercial banks, finance companies, government agencies formed for the express purpose of extending credit, and any other individual or institution desiring security when making a commodity loan. Group two would include: borrowers who want to use warehouse receipts as evidence of collateral, and individuals who wish to have their commodity traded on an organized commodity exchange (since one of the requirements of these exchanges is that the goods be represented by a bona fide warehouse receipt).

G: Why Use Warehouse Receipts?

The reasons for using warehouse receipts are many, but perhaps by drawing a comparison here between the use of these receipts as opposed to the use of a chattel mortgage the reader may be better able to envision the true worth of the warehouse receipt.

The advantages of warehouse receipts over chattel include the following points: (1)

1. For a more thorough discussion of this comparison see:

Schneider, W.J., Field Warehousing, New York, MacMillan, 1941, pp. 4 et seq.

Commercial Bank Management, Committee on Banking Relations, American Warehousemen's Association, Chicago, 1945, pp. 7-8

Warehouse Receipts

1. Uniform Warehouse Receipts Act adopted by all 48 states. Thus confusion and conflicting legal decisions in different jurisdictions are avoided.
2. A negotiable warehouse receipt transfers title and possession is prima facie evidence of title to the goods.
3. Recourse to a notary and recordation is not necessary.
4. Warehouse receipt acknowledged document of title.
5. Transfer of title effected by delivery of receipt. It may be foreclosed as a pledge and legal action usually is not necessary.
6. Warehouse receipt secured loans may be rediscounted.
7. Possession and control of goods covered by a warehouse receipt remain in the hands of a disinterested third party..... the warehouseman.

Chattel Mortgages

1. No national uniform chattel mortgage law. Laws in various states differ substantially.
2. Records must be checked to ascertain first lien.
3. Mortgages must be recorded and signatures sworn to before a notary as a protective device against other creditors.
4. Chattel mortgage only a lien on goods.
5. Legal proceedings required to obtain title; a lawyer, sheriff, notice and sale are necessary.
6. Chattel mortgages are not rediscountable at Federal Reserve Banks unless they are accompanied by a financial statement and proof that funds are intended for commercial or agricultural use.
7. Goods covered by a chattel mortgage remain in the hands of the borrower. Though he may not have the right to mishandle the goods, he has the power to do so.

8. Property secured by a warehouse receipt and under pledge may be sold without recourse to a Bankruptcy Court.

9. Negotiable warehouse receipts may be negotiated anywhere and non-negotiable warehouse receipts may be transferred through assignment.

8. In bankruptcy, goods secured by a chattel mortgage automatically fall under the jurisdiction of the Bankruptcy Court.

9. Chattel mortgages are not negotiable.

H: Field Warehousing

Previously it was pointed out that warehouse receipts can be issued for goods that are actually stored in a public warehouse, or for goods that are stored on the owner's own premises in the custody of a bona fide warehouseman. The mechanics of the first-mentioned case, issuance of receipts against goods actually stored in a public warehouse, are not hard to envision. The second type, field warehousing, is purely and simply a utilization of warehousing for financial purposes.

"Field warehousing may be defined as the establishment of a valid bailment upon the premises of the borrower by an independent third party, thereby creating a change of possession and an effectual pledge." (1) In order for a valid bailment to exist, the field warehouse company must have what is known as "continuous, notorious, and exclusive

1. Schneider, op. cit., p.3

possession of the goods stored with it".

Whereas in previously mentioned problems, it was always a case of bringing the goods to the public warehouse, in field warehousing the warehouse is brought to the goods. While storers use conventional public warehouses for a number of reasons, i.e., transportation savings, spot stocks, branch house operation, etc., the motive back of a field warehousing arrangement is the desire of the storer to enlarge his credit. He wishes to place his products in such a position that they can be pledged as collateral for a bank loan.

This type of warehousing is particularly useful to manufacturers whose production ordinarily is completed within a few months of each year. Producers of industrial raw materials also use this service extensively, and in recent years wholesale distributors of drugs, liquors and groceries have also found this method of financing useful. Originally, for reasons which will be discussed below, field warehousing came into being in the agricultural markets. But, it has spread to the manufacturing field to such an extent that the following goods are only representative of the over 500 different classifications of commodities which have been field warehoused: radios, refrigerators, automobile tires, textiles, shoes, clothing, flour, wine, steel, and iron, liquor, paper, paint, cement, sugar, rubber goods, petroleum and by-products, furniture, meat and meat products, dairy products, machinery, lumber, toys, and all types of canned

goods.

I: Reasons For Using Field Warehousing

When a manufacturer finances by field warehousing, the cost of working capital is carried by his inventory. Because the inventory in most businesses represents the largest of the current assets, this would seem to be logical. Then, too, ordinarily interest rates quoted on discounted warehouse receipts issued by a bona fide field warehouseman are lower than real estate interest rates are. Inventory loans, too, are much more flexible than real estate loans could be. Thus loans can fluctuate with the seasonal needs of production and marketing forces. Through commodity loans the producer may be aided in smoothing out the peaks and valleys in production and demand and assure himself of an adequate supply of raw materials to maintain a uniform rate of production.

Since field warehousing is essentially a tailor-made type of operation, a general discussion of the use of warehouse receipts is not called for here. An exemplification of various uses of field warehousing might be of value, however.

It was previously stated that field warehousing got its start from the special needs of agricultural producers. According to Haring, field or custodian warehousing seems to have originated in the South and Southwest for cotton

and grain. (1) A basic tenet of the cooperative agricultural movement has been the warehousing of the crop as soon as it has achieved commercial value (by harvest). This can be said without fear of contradiction since cooperatives try to promote orderly marketing and receive higher prices for their product by withholding certain increments of the crop from market for a period of time. In order to withhold a portion of the crop, that portion must be stored in some sort of a warehouse. Unfortunately, or fortunately perhaps, all farmers are not members of cooperative organizations. Yet, individual producers as well as the cooperative organizations often wish to avoid the glut on the market which frequently results immediately after the harvest period.

At first, the lack of adequate warehouse facilities for cotton and grain plus the desire of the producer to turn his commodities into cash loans made a modification of warehousing necessary. In addition, there was frequently a shortage of space in farm products warehouses at harvest time, and during recent years there has also been a shortage of railroad cars to transport goods to warehouses at this time. Consequently, the only solution under such conditions was to push the warehousing process back one step towards the producer. Field warehousing fitted this need perfectly,

1. op. cit., p. 172

and its benefits for agricultural producers have been many. It has served to lessen the flood of goods which ordinarily hit the market at harvest time. The demand for railroad cars at crop-moving time has been lessened. The time of moving crops to market has been lengthened with a resulting drop in supply pressure at any one particular time. And together with all this, the producer has been able to secure funds by pledging a secured warehouse receipt on the stored goods as collateral.

As another example, the practice of canners can be cited to illustrate the field warehousing principle. Canners pack their various products at harvest time, the very time when railroad facilities are being taxed to move the fresh produce from the cannery ~~is~~ strict. If the canned goods were to be hauled at the same time an increased burden on rail facilities would result. Also, if the canned product were transported only to a neighboring city, there to be placed in a public warehousing for fund-raising purposes, "dead transportation" would be the phrase that applied. No economic purpose would have been served by moving the goods to that particular warehouse, since the canner's location would have served just as well as a distributing point. Thus, the transportation would be an unneeded added expense, as would the handling and crating of the product. In the canned goods industry, labeling of goods is postponed until a sale has been made because

the canner must know the purchaser's wishes before any label can be placed on the cans. Obviously, the cans must be uncrated to receive the label, and then recreted for shipment. The canning industry then has the need for the goods to remain in the cannery, uncrated and unlabeled until they have been sold. To ship them to a public warehouse for credit purposes would be an economic waste which could be, and is, avoided by setting up a field warehouse in the cannery.

These special instances do not, of course, apply to all industries, but they do serve to illustrate how field warehousing may dovetail perfectly with the needs of the particular industry or firm which it is serving. It is important to remember that field warehousing is custom-made, designed to meet the peculiar needs of the firm which desires a field warehousing arrangement. (1)

J: Field Warehousing Costs Cheaper

As should be expected, the costs of field warehousing are lower than it would cost to store the same or comparable goods in a regular public warehouse. It is clear that the warehouse or the building in which the goods are to be field warehoused is owned by the borrower. Thus the charges of the field warehouseman will be calculated on a lower base

1. Detailed case studies on field warehousing will be found in the Appendix.

because investment in the building, equipment, and perhaps insurance has already been made by the storer and does not have to be borne by the warehouseman. Then, too, the cost of two handlings is avoided. The goods do not have to be processed through a conventional public warehouse and the resulting handling charges are avoided. The cost of transportation between the point of production and a public warehouse is avoided. Lost time and possible damage to the commodity in transit are avoided since the goods will remain in the producer's factory.

If the purpose of storage is credit-raising only, provided the producer has adequate storage facilities, the field warehouse probably can best serve his needs. If, on the other hand, he has no storage facilities and wishes to use a general merchandise or cold storage warehouse as a distributing point.....the warehouse receipts will have to be issued by this warehouseman in the conventional manner.

K: Mechanics of Field Warehousing

It has been previously stated that field warehousing is a tailor-made service. Consequently, a detailed explanation of its mechanics would be misleading since such a detailed explanation could apply only to one or a few firms. However, since starting a field warehouse is not a complicated undertaking, the following will serve as a general explanation of the operation.

1. Selection of a warehouseman.

The first step for a producer desirous of establishing a field warehouse on his premises is to choose a warehouseman to operate that warehouse. By the terms of the Uniform Warehouse Receipts Act, a warehouseman is defined as one who is "lawfully engaged in the business of storing goods for profit". The courts have repeatedly held that transactions involving a fake warehouse set-up, or a warehouse which is controlled by the borrower, are invalid. Warehouses of this type are commonly referred to as subsidiary warehouses, and according to the terms of the Warehouse Act even though warehouses of this type purport to issue valid warehouse receipts....the receipts are not protection for the holder against the claim of creditors or subsequent purchasers without notice. The first step, then is the selection of a bona fide warehouseman to operate the field warehouse.

2. Determining the place of storage.

Field warehousing means bringing the warehouse to the goods. Consequently, the warehouse will exist in the place where the goods ordinarily are stored. Space is leased to and controlled by the public warehouseman, and it is essential that the warehouseman have exclusive possession of the leased premises and the goods stored. The fact that the goods are stored on the premises of the borrower does not make the warehouse a subsidiary one. The place of storage

is immaterial, but it is vitally important that the goods be in the exclusive possession of the warehouseman. The borrower must not have control over the goods.

3. The goods must change hands.

It was stated earlier that the warehouse company must have "continuous, notorious, and exclusive possession of the goods stored with it". It is essential that the stor-er has no access to the goods, and notice must be given to the public that the goods have changed hands. Ordinarily this is accomplished by posting a number of signs in the area set apart for the warehousing operation stating clearly that this area is controlled by such-and-such warehouse company.

4. Segregation of goods.

Except in the case of fungible goods, all warehouse operators are required to keep goods separate from goods of other depositors, and from goods of the same depositor, so as to permit at all times the redelivery or identification of goods deposited. In a field warehousing operation, the goods pledged must be kept separate from the unpledged goods of the stor-er. If the stor-er were allowed to keep his own goods together with field warehoused goods, there would be no exclusive control by the warehouseman. Since valid warehouse receipts cannot be issued unless the

warehouseman does have such control, the goods must be kept separate.

5. The warehouseman's custodian.

One of the essential elements of a field warehousing set-up is that an individual, known as a custodian, must be employed by the warehouse company to receive or release goods from storage. This individual, responsible only to the warehouse company, acts as stock-keeper and protects the stored goods. Although it is the practice of most large warehouse companies to hire one of the employees of the borrower to act as custodian, this does not make the warehouse operation a subsidiary one since the courts have held repeatedly that the warehouseman has assumed the entire risk.

L: Subsidiary Warehousing

Previously, in the discussion of field warehousing, subsidiary warehouses have been mentioned a number of times. The Uniform Warehouse Receipts Act requires that the operator of a warehouse must be a bona fide warehouseman "lawfully engaged in the business of storing goods for profit". To the bona fide warehouseman is given the authority to issue valid warehouse receipts. Warehouse receipts issued by the depositor of commodities or by an agent of the depositor or by a dummy company owned or controlled by the depositor (if the depositor is not himself a bona fide warehouseman) are known as "subsidiary warehouse receipts", and the

practice is referred to as "subsidiary warehousing".

It is regrettable that this practice is yet in existence. However, as is true in other lines of endeavor, all too often certain states and the Federal government are much too lax in the licensing of warehousemen. The licensing of a warehouseman under the United States Warehouse Act or under many State Warehousing Acts does not in itself give that warehouseman the right to issue valid warehouse receipts. And, if the receipts have not been issued by a bona fide warehouseman, then the holder is not protected against third party claims.

There has been a continuing war between the American Warehousemen's Association and the administrators of the United States Warehouse Act concerning the licensing of subsidiary warehousemen. Thus far, however, licenses are still being issued to warehousemen who, in the eyes of the law, are not qualified to issue valid warehouse receipts.

The apparent inconsistency between official licensing on one hand and non-recognition by the courts on the other is difficult to understand. Nevertheless, that is the situation today. There are many bankers who accept the receipts of subsidiary warehousemen as security for commodity loans, however. The reasons for this are manifold. For one, it is often difficult for a banker to trace the genealogy of a warehouse concern. Then, too, the warehouse

receipts may have been issued by a depositor whose financial position is so strong that regardless of what might happen the loan would still be repaid. In another instance, the banker might feel reasonably sure that there would be no third party claims which would have priority to the goods supposedly secured by the warehouse receipt.

However, as a general statement, it certainly can be said that the warehouse receipts issued by a bona fide warehouseman are superior collateral to those issued by a subsidiary warehouseman.

M: Summary

Some of the financial services of the public warehouse have been discussed. The Uniform Warehouse Receipts Act and its background have been referred to. Types of warehouse receipts and warehouse receipt requirements were listed. The users of warehouse receipts were divided into two broad groups, and the advantages of the warehouse receipt over the chattel mortgage were illustrated to show in part why the warehouse receipt has had such wide acceptance.

Field warehousing, "the establishment of a valid bailment upon the premises of the borrower by an independent third party", was discussed together with some of the reasons for using field warehousing. It was shown that field warehousing got its start because of the lack of warehouse facilities for certain agricultural commodities. Later, this

tailor-made service offered by warehousing concerns proved ideal as a means of using inventories to finance working capital loans.

The mechanics of field warehousing were discussed, and it was seen that the essential steps are: selection of a warehouseman, determining the place of storage, the goods must change hands, segregation of goods, and the warehouseman's custodian.

Subsidiary warehousing, conducted by a warehouseman not "lawfully engaged in the business of storing goods for profit", rounded out the discussion of the financial services of warehouses. It was shown that although subsidiary warehouses are officially licensed by a State or the Federal government, the courts have consistently refused to consider warehouse receipts issued by these warehouses as being valid. Finally, it was stated that as a general rule, although subsidiary warehouse receipts often are accepted by bankers, the warehouse receipts issued by bona fide warehousemen are superior collateral to those issued by a subsidiary warehouseman.

VIII: THE BRANCH VERSUS THE PUBLIC WAREHOUSE

A: The Raison d'Etre

Since for many of the points previously discussed it would appear that the branch sales agency could meet the problems as well as the public warehouse, why hasn't the branch been given more attention?

It has not been completely denied that the branch could do many of the things which the public warehouse concern claims to do.

For example, in the field of transportation, certainly shipments could be made to the branch to effect savings accruing because of the spread between less-than-carload and carload freight rates. Insofar as the handling of pool cars is concerned, there would be no need of shipping via pool car if a branch were located in the receiving market since a full car could be consigned to the branch manager.

Again, so far as spot stocks are concerned, the branch should be at least as satisfactory a medium for keeping stocks close to the customer as the public warehouse claims to be.

So, what, if any, are the advantages in distributing through a public warehouse rather than a branch?

B: Costs: Public and Private

1. The rental cost for storage charges and space usually

is less in the public warehouse than it is in the branch storeroom or private warehouse.

2. The storage charges of the public warehouse include rent, heat, light, etc.

3. Insurance rates customarily are lower in the public warehouse than in the branch storeroom because of modern fireproof construction, sprinkler systems, and other improvements oftentimes not found in the branch storeroom.

4. Because of wide aisles, palletization, and fork lift trucks, the handling charges of the public warehouse may be materially lower than those of the branch storeroom.

5. Ordinarily, public warehouses have their own railroad sidings. This is seldom possible for branches. Thus, possible demurrage charges, expenses for loading, unloading, and trucking are either eliminated or reduced.

6. By storing in a public warehouse, the capital investment required to maintain a branch storeroom or private warehouse is avoided.

7. Since public warehouse charges are quoted on a per unit basis, a shipper can accurately predetermine what his costs of operation are going to be at any particular volume.

C: Selling or Administration?

It would seem that the primary task of the branch manager is a selling one. It is his job to provide the leadership which is necessary in order to have the sales force do

an effective selling job. If the branch manager's attention is directed to the supervision of the storage operation, if he must supervise clerical and laboring help, by directing his attentions to these uncongenial tasks..... a detraction is made from his primary job of directing the sales force.

If, on the other hand, the goods are stored with a professional warehouseman, it may be that the branch manager can devote his entire effort to his primary task secure in the feeling that his stock is being handled by experts.

D: Flexibility

It is the rare business firm which maintains a uniform volume throughout the year. Typically, the average business firm experiences three, four, or five months during the year when sales are heavy, and for the rest of the year volume is at a considerably lower level.

Where a private warehouse or a branch storeroom is used, this private facility must be sufficiently large to provide the space needed during the firm's peak sales period. Because of this, it necessarily follows that there will be a great deal of unused space during some months of the year. Although this space is not productive, the cost of maintaining the space is not lessened. In contrast to this, one of the advantages of the public warehouse is its elasticity. The warehouse may be utilized in exact propor-

tion to the user's needs. And, since charges are based on units, the per unit cost will be the same whether a small or large volume is being handled.

E: Superior Service, Cost Control?

So far as superior service is concerned, though this is the claim of warehousemen.....there is no natural law which gives the public warehouse an advantage over the private warehouse in this respect. Given the same volume and similar types of buildings, it is quite possible that the private warehouse could out-strip the public warehouse. It is true, however, that the majority of modern public warehousemen are experts in handling and storage problems. Seemingly, because these men are professionals in this field, they should be able to do at least as well as, if not better than, individuals who are not intimately acquainted with the problems involved in the actual physical handling of goods.

The modern trend in the public warehouse industry is towards continued mechanization of operations. Scientific utilization of storage space has moved hand-in-hand with the continued mechanization of goods handling, which would seemingly give the public warehouse an advantage in the cost area. However, for any two warehouses.....one public and one private.it cannot be said that either has a decided advantage insofar as service and cost control are concerned.

The evidence is that the public warehouse is more

eminently suited for the task of handling either small or fluctuating volumes of business. Many firms have used public warehouses to break into a market. Then, after they have built up a sufficiently large volume, these firms proceed to operate their own warehouse. The principle is the same as the large manufacturer eliminating the wholesaler in areas where business is sufficiently heavy for him to do so profitably. Where a manufacturer does have a large volume of business, he may secure the profits of a warehousing operation by performing that operation himself. Curiously enough, however, many large concerns, seemingly with a volume sufficiently large to support a private warehouse, have not forsaken the public warehouse concern. The only conclusion one can draw from this is that these concerns feel that the warehouse concern, a specialist in storage and distribution, is better able to provide the necessary storage than the individual firm is.

F: Other Services

There are certain other services which the modern warehouse concern is in a better position to perform than the average branch agency storeroom. Among the services which many present-day warehouse concerns are prepared to offer are the following: bottling, boxing, financing, fumigating, grading, hauling, labeling, motor transportation, handling, mothproofing, moving, operation of public truck

scales, quick-freeze facilities, rental of space for manufacturing, offices, showrooms, rigging, sales representation, sample distribution, sorting, stevedoring, and various other functions. (1)

Since the average branch is hardly in a position to perform these services, it is necessary that the public warehouse concern be able to provide any one of the myriad number of services which may be needed in the marketing of a product.

G: Summary

A comparison between the public warehouse and the branch storeroom has been drawn, and it would appear that the public warehouse has taken first honors. It was seen that the branch could do many of the things which the public warehouse offers as services, i.e., savings on transportation, maintenance of spot stocks, etc.. A comparison of costs of operation between the public warehouse and the branch storeroom was then considered. It was seen that for seven different reasons the costs of the public warehouse are likely to be lower.

In further comparing the branch and the public warehouse, the function of the branch manager was considered.

1. Public Warehouse Section, Distribution Age, February, 1949, p. 76

The discussion centered upon that which is purported to be the primary function of the branch manager: the direction of the sales force. The point was advanced that this primary function might well suffer if the branch manager had to devote his time to the supervision of the warehousing or storing operation.

The flexibility of the public warehouse was then examined. It was seen that the charges of the public warehouse are on a per unit basis, which means that a shipper would not have to pay for space which he could not use. Because of the peaks and valleys in the sales figures of most business concerns, the inelasticity in the cost of maintaining the branch storeroom would appear to be a great disadvantage.

The matter of superior service and cost control, while seemingly a moot point, may be judged on mechanization. The public warehouseman, ostensibly a handling and storage expert, has turned willingly to mechanical improvements. Since this is the rule rather than the exception, it is probably true that the warehouse deserves a rating over that of the branch storeroom in these considerations.

A number of the facilitating services which the public warehouse concern is able to provide were then mentioned. Since the average branch is so constituted that it would be difficult for it to render these services, it would

seem that where these services are needed.....the public warehouse would be a more effective distribution medium than the branch agency.

The experience of many large firms using a public warehouse in a given distributing area until sufficient volume was developed to support a private warehouse was then discussed. Where a large volume could be developed, it is reasonable to assume that the large concern would eventually attempt to secure for itself the profit which would accrue from a privately operated warehouse facility. Nevertheless, even though a transition from public to private would seem logical when volume had been developed, some large firms have hesitated to make such a change. The evidence then would seem to indicate that some firms, regardless of size and volume, are convinced that the warehouse concern can perform the storage function more economically than the private concern can.

IX: CONCLUSION

A: Perspective

To re-state all that has been said before would not be in keeping with the method in which this thesis has been written. There has been no aim here to prove anything, and it is doubtful if anything has been proved. Rather, an attempt was made to state lucidly the information about the public warehouse which the business man would like to know.

Generally, the format was designed to make the assimilation of that information easier. After the Introduction had been written, it seemed as though a logical indoctrination to the warehouse industry could be made through the medium of the chapter entitled Background To The Warehouse Industry. Then, since the selection of a given warehouse to fit into a particular scheme of distribution should be made only after a consideration of three factors, transportation, sales, and taxation, the next four chapters covered respectively: Transportation and Warehousing, The Public Warehouse and the Sales Force, The Public Warehouse and the Industrial Market, and Taxation of Warehoused Goods. The Financial Services of Public Warehouses were then discussed. Finally, although a comparison between public and private storage had been inferred throughout the discussion, a direct comparison of The Branch versus The Public Warehouse served to round out the appraisal of warehouse services which was the aim of this

thesis. After each section a summary was written to group together the items of importance mentioned in that section. Since each section has thus been summarized, restatement here would serve no worthy purpose.

B: Foresight

What has been written is already history; it is an elucidation of practices now extant in the warehousing industry.

Yet, a mere explanation of what already exists is not sufficient. What portends for the morrow is infinitely more important.

The older function of the public warehouse..... to receive, store, and dispatch goods.....has in a sense pervaded the warehouse industry's thinking. Storage is necessarily a waiting game. And although public warehouses have decidedly improved practices within the industry, they have waited for outsiders to come to them. With the exception of traffic managers, relatively few businessmen are aware that the warehouse industry is eminently well-fitted to solve many of the distribution problems which beset the individual business firm.

The public relations job which the warehousing industry has done is a poor one. One would almost believe that they have tried to keep their business a secret, for even in the formal study of marketing made in collegiate schools of

business throughout the country.....little mention is given to the warehousing industry. General texts in marketing seldom devote more than one or two paragraphs to the public warehouse, and there are few adequate texts to cover the field of warehousing itself.

Recently, the warehouse industry gave evidence that this situation, needful of correction, would soon receive the attention it deserved. The trade journals serving the industry have devoted increasing portions of their space to the problem of advertising the individual warehouse concern and the warehousing industry. Various associations of warehousemen have grown by leaps and bounds. Business solicitors for the warehouse concerns such as Allied Distribution and Distribution Service have also given attention to this problem.

The warehouse industry seemingly has something to offer, but too few people know what it is. In the immediate future then, though continued attention will undoubtedly be paid to improvements within the warehouse industry.....improvements are needed outside the industry, too. The warehouse industry has been lax in selling its services and itself. Of late, the industry has recognized this fact. Advertising and circularizing to people who already know the industry, traffic managers and others, is admittedly important, but it is not enough. Other executives in business concerns

should also be acquainted with what the warehouse concern has to offer.

It is an education program of this sort which will come to the industry in the future. Modern competitive society does not allow you to hide your light under a bushel and yet prosper. At last, the warehousing industry shows signs of recognizing this fact.

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I: BASIS OF WAREHOUSE CHARGES

A: General Merchandise Warehouses

A manufacturer need only furnish the following information to the warehouseman in order to receive a quotation covering the costs of storing his product. (1)

1. Name and nature of the commodity.
2. How packed, whether in wooden cases, fiber cartons, barrels, drums, or other containers.
3. Dimensions (height, width, and length) of each size and style package.
4. The number of different brands or styles of the commodity and the size of each package.
5. The approximate value of each style of package.
6. Whether shipment to warehouses will be in carload or l.c.l. quantities.
7. Whether delivery (trucking) service will be required in addition to storage and handling in the warehouse.

In addition to the above quotation data, there are a number of other services which the warehouse charges separately for, such as: bottling, boxing, financing, fumigating, grading, hauling, supplying material, repairing or coopering, weighing, repiling, handling either "In" or "Out", inspection, mothproofing, labeling, motor transportation, operation of public truck scales, quick-freezing, sorting, stevedoring,

1. Frederick, J.H., "Public Warehouses in Distribution", Distribution and Warehousing Directory, 1946 annual.

making collections of money for customers, paying freight charges for customers, furnishing revenue stamps, rental space for offices, showrooms, or manufacturing, providing office service, special telephone service, invoicing, sales representation, sample distribution, etc.

B: Field Warehousing

There is little uniformity in the charge made by field warehouse concerns for their performance of the storage operation. Generally, however, the contracts usually stipulate that the following items will be paid for by the storer:

1. Cost of lease recordation.
2. The salaries of the bonded agent, the watchman, and any laborers necessary to operate the field warehouse.
3. The premiums on the fidelity bonds covering the workers in the field warehouse.
4. If performance bond is required by law, the storer must pay for this bond.
5. Any other type of insurance which may be required in a particular field warehousing operation.
6. Travel expenses and costs of warehouse auditors.
7. Inspection fees.
8. License fees where required.

It is the aim of the field warehousing contract to have the storer reimburse the field warehouse company for all the direct expenses involved in the setting up of

the warehouse operation. In addition, for the warehouse company to make a profit, a charge for storage has to be made. Although this charge is in addition to the items mentioned above, since the premises are ordinarily owned by the borrower, the costs of the field warehousing operation are customarily considerably below those of the conventional warehouse concern.

III: CASE HISTORIES ILLUSTRATING FIELD WAREHOUSING (1)

A: Case History Number One

This is a case of a large wholesale grocery concern which operates a chain of stores throughout the eastern states. The business was largely family owned. Under the guidance of its founders, it prospered and expanded. Succeeding generations, however, did not have the merchandising ability of the founders. Because of that inability and the growth of competition, the affairs of the company became involved. On account of the large size of the business and its widespread ramifications, a definite attempt was made by several banks to keep the concern going.

During their efforts, a food manufacturer wished to sell the wholesale concern approximately 10,000 cases of soups. It was a desirable deal for the manufacturer, because the grocer had a great many outlets and a large clientele.

Nevertheless, the credit department of the manufacturer would not approve an extension of credit to the grocer. The soup manufacturer then tried another way to make the sale. He approached a warehouse company, arranged to ship the soup to its warehouse at the grocer's distributing

1. These cases were taken in toto from Schneider, W. J., Field Warehousing, New York, MacMillan, 1941, pp. 64 et seq.

center, and obtained a loan at a bank against the 10,000 cases of soup. During the succeeding six months, the grocer sold 8,000 cases of the soup, and paid the bank for the goods sold.

At this time, plans for refinancing the grocery company failed and a receiver was appointed. There were still 2,000 cases left in the warehouseman's custody. The soup company paid the balance due on the loan, obtained the warehouse receipts which permitted the withdrawal of the cases for shipment back to its own warehouse. The receiver could not lay claim to the goods as part of the general assets of the grocery company because title to and control over the soup had not passed to it.

This is a good example of the services rendered by field warehousing. It illustrates how a manufacturer of goods is able to keep his product constantly before the public through the medium of a large distributing company, such as the wholesale grocery concern. In view of the latter's poor credit standing, the transaction would otherwise have been too hazardous.

B: Case History Number Two

Because of insufficient working capital, a gold mining company was unable to operate continuously throughout the year. From November first to May first the mine was inaccessible, except through use of snow equipment; it was im-

possible to ship any concentrates until after the spring thaw. Though a quantity of concentrates was accumulated during the winter and sold in the spring, it had never been possible to build up a sufficient reserve of working capital to allow the company to operate continuously.

The mine had a mill of 20 tons per day capacity which produced approximately one ton of concentrates daily. The average value of the concentrates was \$450. per ton. Payrolls and operating expenses ran between \$2,000 and \$3,000 a month.

Although the company invested heavily in machinery and other fixed assets to carry on operations, lack of working capital had practically forced a decision to close down.

A representative of a field warehouse company was approached and asked if it would be possible to arrange bank credit whereby the mining company could borrow up to \$20,000 on a note secured by the warehouse receipts issued against an accumulation of gold concentrates. The loan was placed with a bank in a nearby financial center.

To install a field warehouse at the mine, the warehouse company first leased the platform on which the concentrates were stacked and the area surrounding it. Signs were posted giving notice to all that this area and the commodities therein were in the exclusive possession of the warehouse company. A warehouse manager and watchman were placed in

charge of the warehouse. One of them was on duty at all times. Each of these men was placed under bond for the faithful performance of his duties.

As concentrates came out of the mill, they were weighed, sacked and stacked on the platform in the open. At the time they were sacked, a heavy moisture content caused them to weigh a great deal more than they would weigh when finally sold.

In order that the lending bank might have an assay report and lend according to the value of the merchandise, the bonded agent was instructed as follows:

"You have been supplied with a large airtight can in which you are to deposit a small sample of each sack of concentrates at the time they are weighed by you and deposited in our warehouse.

"When you issue your Bonded Agent's report covering the concentrates deposited in our warehouse, you are to draw a wet sample from a large can which is made up from small samples taken from each sack warehoused, place this sample in one of the small cans left with you, and close the can containing this sample securely so that it will retain the original moisture....."

From the bonded agent's reports, warehouse receipts were issued and attached to the assay report. Advances were made by the bank against these warehouse receipts.

Under this arrangement, the mining company operated continuously and borrowed to the full extent of its credit line. In the spring, the concentrates were released from the warehouse and shipped by truck to the smelting company in the name of the bank holding the receipts. After smelting and sale of the gold, the bank and the warehouse company were paid in full.

Thus, by the use of field warehousing, the mining company was able to continue operations throughout the year on a profitable basis. Not only was there a profit made on the additional mining the arrangement made possible, but savings were effected through holding the working force together and spreading depreciation. Furthermore, benefits from this continuous operation accrued to the smelter.

C: Case History Number Three

The XYZ Company manufactured a specialty for which demand existed for only a few months of the year. For a certain period of time, it was necessary to hire extra help and to work overtime in order to make deliveries. To pay for this, a bank loan was sought.

The XYZ Company obtained from a mail order house, the largest buyer of the specialty, an order for a quantity of the goods sufficient to liquidate the loan. Delivery was to be made as needed, within a specified time. By this means the bank was able to lend money on the product as it was manu-

factured and stored pending delivery; the manufacturing company was able to retain its experienced help throughout the entire year.

The deal was made possible because of field ware-house financing.

APPENDIX B

**PUBLIC WAREHOUSING OF GENERAL MERCHANDISE
SPACE AND OCCUPANCY INFORMATION**

AS OF May 31, 1948

Geographic Division and State	May 1948				# Percent Occupancy			
	Firms Reporting	Buildings Reported	Floor Space		May 1948	April 1948	May 1947	May 1940
			Thousands of Square Feet Occupiable	Occupied				
UNITED STATES	562	1,873	45,088	39,402	87.4	88.8	89.2	72.3
<u>NEW ENGLAND DIVISION</u>	47	184	4,492	3,713	82.7	83.5	87.1	50.0
Massachusetts, except Boston	20	60	1,301	1,147	88.2	89.7	86.9	
Boston	13	89	2,280	1,845	80.9	81.0	86.9	
Rhode Island and Maine	7	20	639	542	84.8	85.3	92.1	
Connecticut	7	15	272	179	65.8	70.2	77.2	
<u>MIDDLE ATLANTIC DIVISION</u>	111	720	16,110	13,893	86.2	87.8	89.3	74.6
New York, Metropolitan District	53	553	10,551	8,613	81.9	84.0	87.7	
Brooklyn and Manhattan	39	521	7,651	6,185	80.8	83.1	85.8	
Necky New Jersey and all other	14	34	2,900	2,458	84.8	86.2	93.2	
New York, except Metropolitan District	21	50	1,150	1,069	93.0	95.8	87.3	
New Jersey, except Metropolitan District	8	21	468	452	96.6	96.5	97.5	
Penn., except Philadelphia and Pittsburgh	13	21	499	465	93.2	93.1	84.9	
Philadelphia	9	61	2,945	2,785	94.6	94.6	94.6	
Pittsburgh	7	12	497	479	96.4	96.0	95.1	
<u>EAST NORTH CENTRAL DIVISION</u>	119	294	8,698	7,886	90.7	91.2	92.3	77.8
Ohio, except Cincinnati, Cleveland and Toledo	12	31	684	626	91.5	91.4	92.2	
Cincinnati	5	8	821	754	91.8	92.0	95.1	
Cleveland	10	17	735	642	87.3	86.5	89.5	
Toledo	5	5	238	158	66.4	65.7	76.6	
Indiana, except Indianapolis	14	20	401	390	97.3	96.8	97.2	
Indianapolis	6	14	514	483	94.0	93.2	98.6	
Illinois, except Chicago	14	32	422	338	80.1	81.0	81.5	
Chicago	19	49	2,376	2,187	92.0	93.9	93.6	
Michigan, except Detroit and Grand Rapids	7	10	184	157	85.3	92.9	96.2	
Detroit	6	16	823	756	91.9	90.4	95.6	
Grand Rapids	4	13	227	213	93.8	93.8	91.6	
Wisconsin, except Milwaukee	11	48	560	530	94.6	92.7	93.1	
Milwaukee	6	31	713	652	91.4	94.7	92.0	
<u>WEST NORTH CENTRAL DIVISION</u>	62	154	3,936	3,390	86.1	93.2	88.0	66.2
Winn., except Minneapolis and St. Paul	3	11	50	44	88.0	82.0	87.3	
Minneapolis and St. Paul	7	23	545	529	97.1	95.8	94.5	
Iowa	14	19	536	489	91.2	92.6	80.9	
Mo., except Kansas City and St. Louis	5	13	199	158	79.4	77.4	81.5	
Kansas City	9	31	826	708	85.7	91.0	85.5	
St. Louis	6	21	1,220	949	77.8	98.4	96.0	
North and South Dakota	7	16	248	235	94.8	95.2	92.0	
Nebraska	5	9	214	191	89.3	91.1	69.6	
Kansas	6	11	98	87	88.8	89.8	86.2	
<u>SOUTH ATLANTIC DIVISION</u>	62	153	2,374	2,971	88.1	89.0	85.0	79.9
Md., Del., and D. C., except Baltimore	3	23	256	216	81.8	80.4	85.1	
Baltimore	7	36	1,355	1,204	88.9	90.2	87.9	
Virginia and West Virginia	14	29	553	498	90.1	91.9	80.2	
North and South Carolina	13	28	410	351	85.6	85.9	79.4	
Georgia	6	9	203	202	99.5	99.5	93.7	
Fla., except Jacksonville and Tampa	8	12	168	160	95.2	90.0	88.4	
Jacksonville	6	7	199	170	85.4	86.9	83.5	
Tampa	5	7	222	170	76.6	75.7	81.2	
<u>SOUTH CENTRAL DIVISION</u>	72	158	2,850	2,380	87.8	87.7	85.3	73.4
Ky., and Tenn., except Memphis	7	18	345	314	91.0	89.6	89.6	
Memphis	8	11	467	436	93.4	90.8	90.4	
Ala., Miss., Ark., and Okla.	15	22	628	565	90.0	89.6	88.9	
Louisiana, except New Orleans	4	5	68	58	85.3	88.2	90.4	
New Orleans	6	21	567	445	78.5	80.4	73.2	
Texas, except Dallas and Houston	22	48	644	618	96.0	95.5	93.4	
Dallas	4	7	291	262	90.0	88.3	81.7	
Houston	7	26	840	682	81.2	82.4	85.1	
<u>MOUNTAIN AND PACIFIC DIVISION</u>	88	210	4,628	4,169	90.1	90.3	92.1	76.5
Idaho	4	9	61	55	90.2	90.5	92.5	
Montana, Utah, and Wyoming	11	14	304	275	90.5	92.1	78.4	
Arizona, Nevada, and New Mexico	5	8	104	100	96.2	95.2	94.2	
Colorado, except Denver	5	10	107	76	71.0	82.2	71.6	
Denver	4	12	247	245	99.2	99.2	98.1	
Washington, except Seattle	7	19	225	207	92.0	87.1	88.5	
Seattle	7	14	412	374	90.8	91.4	95.2	
Oregon	11	29	616	487	79.1	79.4	96.2	
Cal., except Los Angeles and San Francisco	13	54	395	346	87.6	88.1	90.3	
Los Angeles	9	13	1,021	953	93.3	92.8	96.3	
San Francisco	12	28	1,136	1,051	92.5	92.9	90.6	

* Percent occupancy presented for identical firms - April and May 1948.

PUBLIC WAREHOUSING OF GENERAL MERCHANDISE
SPACE AND OCCUPANCY INFORMATION

AS OF JULY 31, 1948

Geographic Division and State	July 1948				# Percent Occupancy			
	Firms Reporting	Buildings Reported	Floor Space		July 1948	June 1948	July 1947	July 1940
			Thousands of Square Feet Occupiable	Occupied				
UNITED STATES	550	1,856	44,367	38,917	87.7	87.5	88.0	71.0
<u>NEW ENGLAND DIVISION</u>								
Massachusetts, except Boston	46	183	4,326	3,599	83.2	83.0	84.3	50.5
Boston	20	60	1,341	1,134	84.6	86.4	85.1	
Rhode Island and Maine	13	89	2,274	1,875	82.5	81.6	83.2	
Connecticut	6	19	439	403	91.8	90.4	90.4	
	7	15	272	187	68.8	67.3	76.1	
<u>MIDDLE ATLANTIC DIVISION</u>								
New York, Metropolitan District	110	719	16,055	13,963	87.0	86.2	88.0	72.7
Brooklyn and Manhattan	52	554	10,486	8,732	83.3	81.7	85.9	
Nearby New Jersey and all other	38	520	7,616	6,246	82.0	79.9	84.3	
New York, except Metropolitan District	14	34	2,870	2,486	86.6	86.5	91.1	
New Jersey, except Metropolitan District	21	50	1,159	1,058	91.3	92.4	92.2	
Penn., except Philadelphia and Pittsburgh	8	21	468	441	94.2	96.2	97.2	
Philadelphia	13	21	500	474	94.8	94.8	92.7	
Pittsburgh	9	61	2,945	2,777	94.3	94.9	90.2	
	7	12	497	481	96.8	97.4	95.3	
<u>EAST NORTH CENTRAL DIVISION</u>								
Ohio, except Cincinnati, Cleveland and Toledo	117	294	8,596	7,825	91.0	90.9	91.3	77.9
Cincinnati	12	31	684	630	92.1	92.0	90.9	
Cleveland	5	8	821	755	92.0	91.8	94.6	
Toledo	10	17	735	657	89.4	86.1	84.1	
	5	5	239	163	68.2	67.8	79.9	
Indiana, except Indianapolis	14	21	436	396	90.8	97.3	97.5	
Indianapolis	5	11	287	280	97.6	97.7	97.3	
Illinois, except Chicago	14	32	429	332	77.4	79.4	76.9	
Chicago	19	52	2,530	2,342	92.6	92.4	90.7	
Michigan, except Detroit and Grand Rapids	7	10	194	168	86.6	88.6	95.5	
Detroit	6	16	823	771	93.7	92.0	95.1	
Grand Rapids	4	13	227	212	93.4	93.4	93.6	
Wisconsin, except Milwaukee	11	48	562	526	93.6	94.3	94.0	
Milwaukee	5	30	629	593	94.3	92.5	93.2	
<u>WEST NORTH CENTRAL DIVISION</u>								
Minn., except Minneapolis and St. Paul	59	151	3,766	3,325	88.3	88.9	88.0	62.9
Minneapolis and St. Paul	3	11	50	46	92.0	94.0	92.7	
	7	23	545	530	97.2	97.4	95.2	
Iowa	13	18	538	427	79.4	85.5	80.1	
Ko., except Kansas City and St. Louis	5	13	199	142	71.4	82.9	88.3	
Kansas City	8	30	744	585	78.6	83.1	82.5	
St. Louis	5	20	1,133	1,098	96.9	89.9	95.9	
North and South Dakota	7	16	248	231	93.1	94.3	91.0	
Nebraska	5	9	211	179	84.8	87.7	72.4	
Kansas	6	11	98	87	88.8	88.8	87.1	
<u>SOUTH ATLANTIC DIVISION</u>								
Md., Del., and D. C., except Baltimore	59	148	2,286	2,820	85.8	86.6	85.6	77.1
Baltimore	3	25	264	216	81.8	80.7	91.8	
Virginia and West Virginia	7	36	1,355	1,158	85.5	87.0	87.2	
North and South Carolina	13	26	535	458	85.6	85.6	88.3	
Georgia	11	26	345	300	87.0	87.0	74.7	
Fla., except Jacksonville and Tampa	6	9	203	189	93.1	99.5	94.6	
Jacksonville	8	12	168	155	92.3	91.1	89.7	
Tampa	6	7	201	171	85.1	86.4	82.4	
	5	7	215	173	80.5	77.9	73.6	
<u>SOUTH CENTRAL DIVISION</u>								
Ky., and Tenn., except Memphis	71	157	3,744	3,235	86.4	86.9	83.6	69.3
Memphis	7	18	345	308	89.3	90.7	88.3	
Ala., Miss., Ark. and Okla.	7	9	363	326	89.8	90.9	88.7	
Louisiana, except New Orleans	14	22	626	568	90.7	89.1	89.2	
New Orleans	4	6	68	57	83.8	85.3	83.1	
Texas, except Dallas and Houston	6	21	567	448	79.0	79.2	70.2	
Dallas	22	48	644	614	95.3	95.7	93.2	
Houston	4	7	291	263	90.4	90.4	84.0	
	7	26	840	651	77.5	79.3	80.8	
<u>MOUNTAIN AND PACIFIC DIVISION</u>								
Idaho	88	204	4,594	4,150	90.3	89.6	90.0	74.8
Montana, Utah, and Wyoming	4	9	63	55	87.3	85.2	87.5	
Arizona, Nevada, and New Mexico	11	14	304	251	82.6	82.6	84.0	
Colorado, except Denver	5	8	104	96	92.3	93.3	92.5	
Denver	5	10	102	74	72.5	66.7	85.1	
Washington, except Seattle	4	12	247	243	98.4	99.2	93.1	
Seattle	7	19	222	204	91.9	89.8	85.2	
Oregon	7	14	412	375	91.0	89.1	92.4	
Cal., except Los Angeles and San Francisco	11	23	590	525	89.0	82.9	84.6	
Los Angeles	13	54	395	352	89.1	89.4	86.0	
San Francisco	9	14	1,035	966	93.3	94.5	95.4	
	12	27	1,120	1,009	90.1	90.7	90.4	

* Percent occupancy presented for identical firms - June and July 1948.

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Cosgrove Russell E. * 658.7

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Public Warehousing c.1

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